

PRIZE CONTEST SEE PAGE 6

SEE
BACK
COVER

AMAZING STORIES

MAY 20c



GIANTS OUT OF THE SUN

by PETER HORN

AND
STORIES BY

MANLY WADE WELLMAN • EANDO BINDER • EDMOND HAMILTON

AMAZING STORIES

VOLUME 14
NUMBER 5

MAY
1940

Listerine likes nothing better than to FIGHT INFECTIOUS DANDRUFF

THAT should be good news to you if you have any sign of this condition.

That's the kind of a case Listerine Antiseptic really welcomes... the infectious type in which germs are active... in which inflammation and itching may be present... in which scales and flakes are a humiliating problem and relief seems far off. Then Listerine really goes to work, often giving amazing results which test cases clearly show.

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First Listerine gives hair and scalp a cooling and refreshing antiseptic bath. The scalp tingles and glows. Distressing flakes and scales begin to go... inflammation and itching are alleviated.

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Extensive research showed that when rabbits were inoculated with *Pityrosporum Ovale*, they soon developed dandruff symptoms like those with which you are familiar. When Listerine was applied daily to the affected areas these symptoms disappeared in 14 days, on the average.

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If you have any sign of dandruff, start the Listerine treatment at once. Neglect may aggravate the symptoms.

Lambert Pharmacal Co., St. Louis, Mo.



THE TREATMENT

MEN: Douse full strength Listerine Antiseptic on the scalp morning and night. **WOMEN:** Part the hair at various places, and apply Listerine Antiseptic right along the part with a medicine dropper, to avoid wetting the hair excessively.

Always follow with vigorous and persistent massage with fingers or a good hair brush. Continue the treatment so long as dandruff is in evidence. And even though you're free from dandruff, enjoy a Listerine massage once a week to guard against infection. Listerine Antiseptic is the same antiseptic that has been famous for more than 50 years as a mouth wash and gargle.



The medical treatment that thousands employ!

MAY
1940

VOLUME 14
NUMBER 5

AMAZING **STORIES**

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MAY,
1940

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Volume XIV
Number 5

The OBSERVATORY

by THE Editor

THIS month, true to our promise of some time ago, we are presenting a contest for our readers. It's the sort of contest we know you like. It's quite simple, and the prizes are really worth trying for.

We got the idea when we read Ralph Milne Farley's "The Time-Wise Guy," and the ending simply howled "CONTEST" at us. So here it is, the contest you've been looking for, and a chance to win some easy money. Complete details on page 6. Just read the story, and tell us what happened to a "wise guy" who thought he could show his professor a thing or two!

AS your editor was writing this column, he was the recipient of a visit from a reader, who took one look, then fled with a howl of terror. The reason was quite a mystery until we finally coaxed him back and got him to admit: "I thought the Martians had invaded again!"

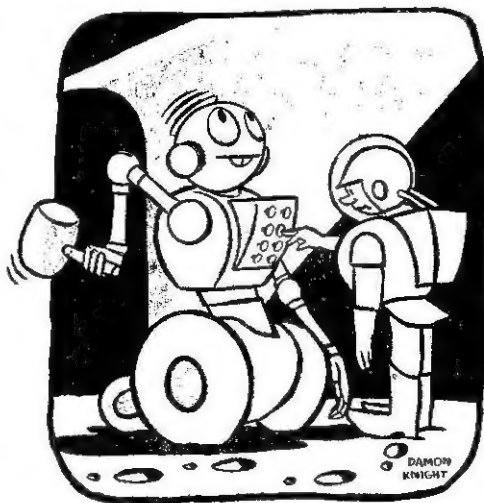
You see, your editor was dressed in his bowling shirt, which is a gaudy green and gold satin, with **AMAZING STORIES** across the back. Which leads us to say that your favorite magazine boasts quite a creditable team and we hereby challenge the Venusians, the Martians, and the Titans to a match anywhere, anytime—even the fourth dimension. We apply *science* to our bowling. Your editor got a 278 the other day. (He had the microbe people of Callisto pushing the pins over for him!)

Seriously, though, we think we've got the only science fiction bowling team in the world. Author Henry Gade is also a member, and he bowls as well as he writes.

IN this issue Hok, the caveman, returns. He's invented the bow, this time. In connection with this story, not only is Manly Wade Wellman proud of his character, and of the scientific accuracy of his stories, but Robert Fuqua, the artist who illustrates Hok, is proud of his conception of Hok, and of the scientific accuracy of his drawings of the man and half-men of those ancient days.

ARE interplanetary stories popular? It certainly seems that they are. For a time we

have been running comparatively few space stories, and we've been hearing about it! Then we ran "Black World" and got more proof of the popularity of this type story. And for the first time in **AMAZING STORIES**, a female character has stolen the spotlight from the usual male lead. Ann Mitchell's predicament brought your editor a few actual threats from irate readers. "If you dare hang that girl...!" they howled. Well, we didn't, but it was a close shave for awhile! Anyway it means we'll be giving you many more interplanetary



"Wonder what this one's for?"

yarns of this type in future issues.

THORNTON AYRE has presented us with a story we are going to forecast well in advance. It's "The Mystery of the Martian Pendulum" and we predict that it will be the most fascinating Martian yarn you have ever read. Never has Ayre done a better piece of work, nor conceived of a better idea! It has all the mystery of "Locked City," and all the suspense of "The Circle of Life," both of which did most to "make" Thornton Ayre.

(Continued on page 125)

\$50 in cash prizes!

HERE IT IS...THE CONTEST YOU'VE BEEN ASKING FOR!

For many months the readers of **AMAZING STORIES** have been deluging your editors with requests for another story contest. Well, here it is. Author Ralph Milne Farley has written another of his unusual time-travel yarns for us, and we were quite fascinated with it, especially with the ending. It immediately suggested a contest, and we proceeded to lay our plans for it.

This contest is one any of our readers can win. It's extremely simple. You don't need to know anything about writing. You don't have to write a story. You aren't expected to know a great deal of science. All you must do is read the entertaining story "The Time-Wise Guy," on page 6, and then, in your own words, in a short letter, tell the editors what you think happened to the hero of the story. In other words, how does the story end?

Your answer should be based on the facts of time travel and its rules, as stated in the story by Professor Tyrrell. Your editors suspect that the correct answer would also shed light on the fate of the Professor's friend in Holland—rather FROM Holland. But of course, there is a little of George Worthey in all of us, and you may not believe this. Editors don't know it all, either—

Except that Ralph Milne Farley has kindly supplied us with the answer, and we know it and believe it. We'll give it to you in the next issue, what's more, and then you'll believe it too.

PRIZES

1st—\$25.00 CASH

2nd—\$10.00 CASH

3rd to 5th—\$5.00 CASH (each)

RULES OF CONTEST

1. Contest open to all, except employees of **AMAZING STORIES**, the Ziff-Davis Publishing Co., and their families.
2. Read the story, and then, in your own words, tell us in a letter exactly what you believe happened to George Worthey, the hero. Letters can be any length, and they should be neat. However, only the opinion actually counts in the judging.
3. Fill out and return with your letter the coupon below, or a reasonable facsimile, if you do not wish to deface your magazine.
4. No entry will be returned.
5. Address all entries to Contest Editor, **AMAZING STORIES**, 608 S. Dearborn St., Chicago, Illinois.
6. The Editors of **AMAZING STORIES** will be the judges in this contest. Their decision is accepted as final by all contestants.
7. All entries must be in the hands of the Contest Editor by April 10, 1940. The winners will be announced in the July issue of **AMAZING STORIES**. In case of ties, letters will be judged as to originality, conciseness, and clarity of presentation.
8. Prize winning letters become the property of **AMAZING STORIES**.
9. The Contest Editor regrets that he is unable to entertain correspondence of any kind regarding entries.

USE THIS ENTRY BLANK

(or a reasonable facsimile)

Contest Editor, **AMAZING STORIES**,

608 S. Dearborn St., Chicago, Ill.

Please enter the enclosed letter in your Time Travel Story Contest.

Name

Street

City..... State.....

CONTEST STORY

The TIME-

"THERE you go again, Professor!"

The class stirred uneasily. A shadow of annoyance passed across the pleasant, kindly face of Professor Tyrrell, and the high blue-veined brow beneath his sparse white hair contorted momentarily.

George Worthey, short and round, dressed to kill, had lumbered to his feet, and had shot his usual challenge at the old Physics professor. Worthey's pop-eyes seemed to protrude even further and his wide almost froglike mouth leered, as he repeated:

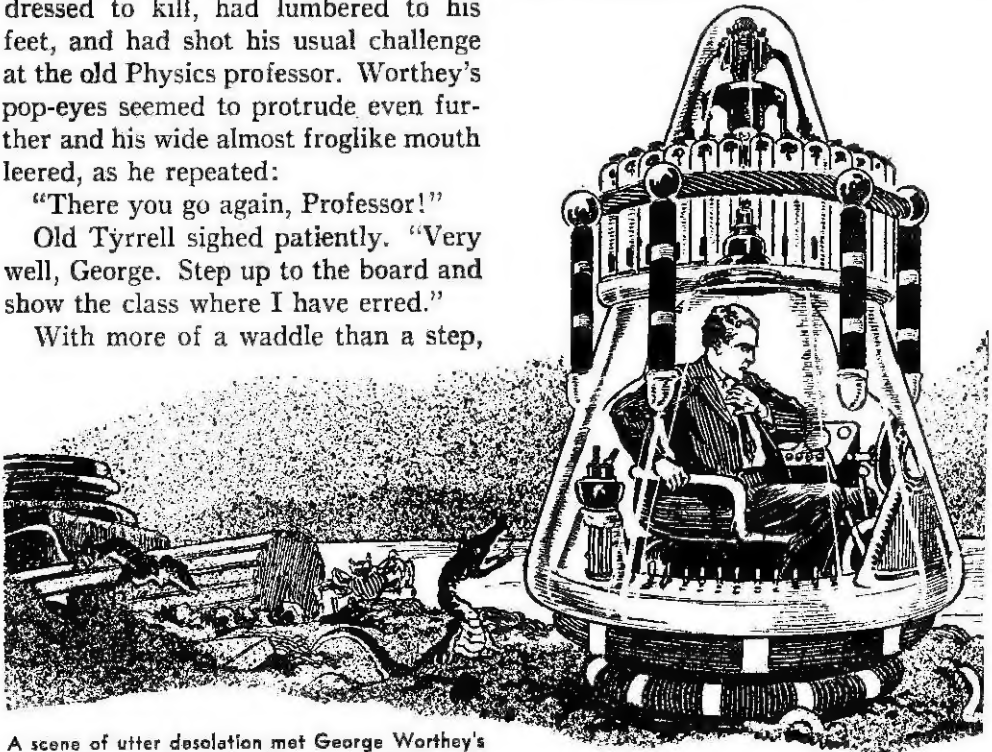
"There you go again, Professor!"

Old Tyrrell sighed patiently. "Very well, George. Step up to the board and show the class where I have erred."

With more of a waddle than a step,

The class all shuffled their feet as he returned triumphantly to his seat. It was the universal college signification of almost anything: approval, disapproval, amusement, disgust. Today it represented diversified sentiments. One student yawned directly at Worthey.

Professor Tyrrell shifted his square-lensed glasses to his high pale forehead



A scene of utter desolation met George Worthey's gaze. The world of a million years from now!

Worthey made his way to the platform, took the long pointer from Tyrrell's pale hands, peered at the blackboard for a moment, then grinned loosely and said, in a loud, meticulous voice, "You dropped the term $17 \times$ a step in

4³

the integration. It should go here."

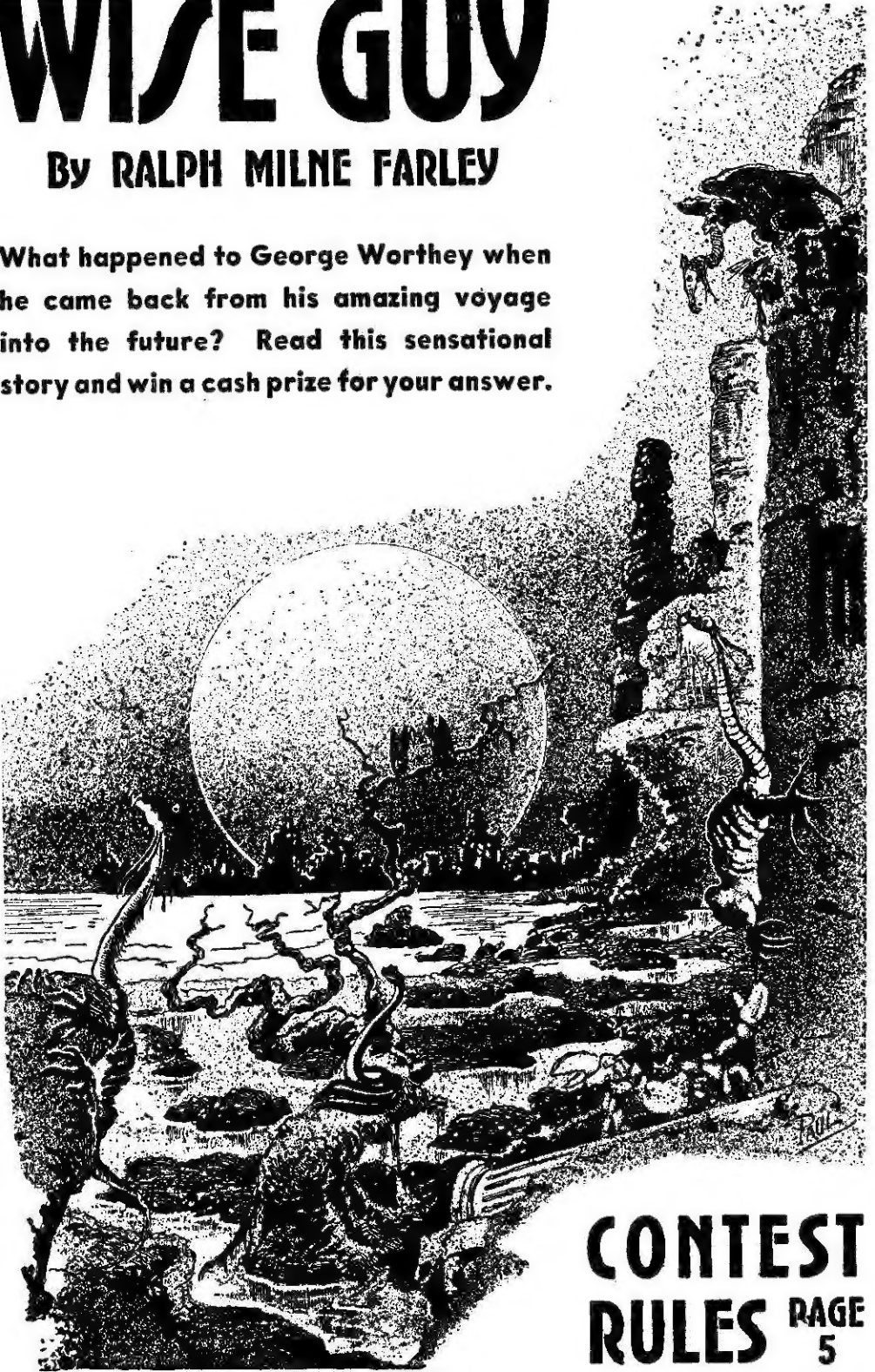
and peered benignly at his students out of watery blue eyes. But there was a certain grimness to his usually placid face, and a certain purpose to his usually pleasant mouth. He held up one slender hand to stop the scuffling.

"Mr. Worthey is quite right," he sighed. "We are fortunate to have him with us." If there was just the trace

WISE GUY

By RALPH MILNE FARLEY

What happened to George Worthey when he came back from his amazing voyage into the future? Read this sensational story and win a cash prize for your answer.



**CONTEST
RULES** PAGE
5

of sarcasm in his tones, the class pretended not to notice it. "Worthey, today's episode has convinced me that I ought to ask you to help me with a very important bit of research in which I am engaged. Could you come over to my house at eight o'clock this evening and help me?"

George Worthey swept a triumphant grin around on his admiring classmates.

"O.K., Professor," he replied, with a magnanimous wave of the one pudgy hand. "Always glad to be of assistance."

THAT evening in Tyrrell's study, after a few minutes of social amenities the Professor poured out two glasses of homemade sweet wine, and broached the subject of the interview.

"I have been working for a number of years on a time-machine," he declared in matter-of-fact tones.

Worthey's pop-eyes moved a little, and he shifted his large feet uneasily. Was this a gag to get his goat? Would the Professor, perhaps, get revenge on him by telling the class on the morrow how gullible he had been? He must proceed cautiously.

"A real time-machine, Professor Tyrrell? Quit kidding. You know perfectly well that time-traveling is the bunk. I'm a bit too bright to fall for anything like that."

"Worthey, you wrong me. Why should I 'kid' you, as you call it?"

Worthey wondered a little at Professor Tyrrell's firm tone, and some of his assurance left him. "I'm sorry, sir, if I seemed unduly suspicious. I thought that you might be trying to sound out my gullibility. Well, shoot! I'm willing to argue the question of time-traveling, or any other question, with you any time."

Tyrrell rubbed his thin hands together and there was a strange gleam in

his kindly eyes. "Now we're getting somewhere."

"All right, Prof, shoot. I'm all ears."

Professor Tyrrell ran his eyes appreciatingly along the sides of Worthey's head, and nodded absent-mindedly. Worthey flushed (and brushed back his sleek brown hair) but Tyrrell, apparently not noticing, plunged into the subject.

"Perhaps the best way to begin," he said, "would be to inquire just why you consider time-traveling to be 'the bunk' as I believe you so excellently expressed it?"

Worthey studied the Professor's cherubic expression for a moment and, after some hesitation, satisfied that the man was in earnest, replied, "Time travel, in the final analysis, comes to a *reductio ad absurdum*, sir. I can't possibly—" He paused, and watched the Professor's face for some clue as to the next line to take.

Tyrrell encouraged him with, "I shall gladly argue that point with you. And I shall try to keep an open mind. I believe that 'Old Tillie', as you students call me, has the reputation of always arguing fairly, and of holding it to a man's credit, rather than against him, if he can convince me of views contrary to those which I hold. Proceed!"

Worthey was secure enough in his remarks not to care whether the Professor held something up against him or not. But he feared ridicule, and this reminder that Old Tillie always argued fairly reassured him somewhat. Cautiously, he said, "If time-traveling was possible, what would prevent a man with a time-machine from traveling back or forward twice to the same point in time and then finding himself already there?"

"Merely," Professor Tyrrell quietly replied, "that such an outcome would be obviously impossible."

"Of course!" Worthey exclaimed, grinning triumphantly. "*Reductio ad absurdum!*"

"Not at all. Rather, say, a perfectly valid exception to time-traveling, exactly as non-divisibility by zero is an exception to algebra. Do you remember the alleged proof, which confused you for a day or two—in your freshman year—that two equals one?"

He rose from his chair, stepped over to a blackboard which stood in one corner of his study and wrote down the familiar sophistry, which begins with $a = b$, and ends with $2 = 1$.*

Putting down his chalk, he turned back to his student, with a grin, and added as he seated himself again, "The only flaw in that supposed *reductio ad absurdum* of the fundamental processes of algebra is that I divided by zero,** which is not permissible. Thus, there is a rule which says: to travel twice to the same point in time is not permissible. What you state would be a violation of the rules of time-traveling."

"Professor Tyrrell," Worthey exclaimed, grinning widely, "you took the words right out of my mouth! I myself was just going to mention that two-equals-one fiasco *against* you. It's not exactly sporting for the mathematicians to invent, as an afterthought, the rule that you can't divide by zero, just to

save algebra from having a hole knocked in it. And now *you* go and do the same thing for time-traveling! Of course, if we let you change the rules in the middle of the game—!" He shrugged his shoulders and snorted.

Tyrrell held up one slender hand in protest, but Worthey kept on relentlessly, "Take football, for instance. Even our championship team couldn't hope to play successfully against no matter how weak an opponent, if the referee had the right to make up a new rule to save the other side whenever he felt like it."

"And yet, isn't that just the effect of Rule Ten?"* Professor Tyrrell mildly inquired.

Worthey grimaced. "Well—er—yes."

THE Professor continued, still smiling provokingly, "That rule was designed to prevent smart alecks from inventing unfair tricks one jump ahead of the Rules Committee. Even if I concede that the rule of algebra and the rule of time-traveling which I have just cited are afterthoughts, which I do *not* concede, we can at least say that they prevent unfairness and thus save the game."

Cornered for once, George Worthey changed the subject. "But, Professor, how do you know that time-traveling *is* possible? And, if so, how do you know that a man can't travel twice to the same time?"

"To your first question, may I reply that *I* myself have traveled in time. As for the second, I know that a colleague of mine in Holland who once attempted to travel back twice to the same date,

* *Editor's Note:* This proof is as follows:

Let $a = b$
 Multiply through by a .
 Then $a^2 = ab$
 Subtract b^2 from both sides.
 Then $a^2 - b^2 = ab - b^2$
 Divide through by $a - b$.
 Then $a + b = b$
 Substitute b for its equal a .
 Then $2b = b$
 $2 = 1$

Q.E.D.

** He divided by $a - b$, which by hypothesis is equal to zero. Division by zero violates one of the most basic rules of algebra. This rule is one of the foundation-stones of algebra, rather than a mere exception.—Ed.

* *Editor's Note:* Rule 10. Sec. II, Art. 7, provides in general that any conduct which the officials deem unsportsmanlike can be penalized, even if it takes place off the field. This rule has enabled officials to penalize retroactively things which were perfectly legal when done.

never returned. Of course, it may be that I have not correctly figured out the cause of his non-reappearance. But subsequently I have tried a little experiment, which seems to me to confirm my theory. I built a miniature time-machine with automatic controls, and sent it back a hundred years in time, with its controls set so as to return here an hour or so after the time of its departure. It returned. After many successful repetitions of this experiment I sent it back to *exactly* a time to which it had been before—it did not return!”

Worthey could think of no adequate reply. Indeed, he had stopped trying. How could he effectively object to any one detail of time-traveling, when time-traveling as a whole was absurd? Especially Old Tillie himself having traveled—what a laugh!

The pale blue eyes behind Professor Tyrrell's square-lensed glasses were studying his student intently. He chuckled. “Would you like to see my time-machine?” Without waiting for an answer, he lifted his frail form out of his chair and headed for the doorway. Worthey rose slowly and followed, a frown on his chubby face.

Down into the cellar of the house they went. In one corner of a workshop, there stood a distorted maze of silver rods, twisted bars of fused quartz crystal, and coils of electric wire, with a padded tractor-seat in its midst and all covered with glass. The seat looked strangely and incongruously real among all that unreality.

Worthey squinted his pop-eyes, bent his tall figure, and walked two or three times around the machine, carefully inspecting it. Then he straightened up.

“There's something quite screwy about it. Oh, I don't mean that as a dirty dig. It's a compliment. Now what the—? I get it! Look!” Worthey tilted his ungainly head on one side, and

gazed at the time-machine from various angles. “The far side always seems nearer than the near side, no matter where I stand! It's like an image in a concave mirror, which is *in front of* the mirror, instead of *behind* it as in the case of an ordinary flat mirror.”

“I'm glad that you remember something from your course in Physical Optics,” Tyrrell beamed disarmingly. “And you *have* hit upon one of the basic secrets of my machine. It *is* distorted; but the distortion exists in the time direction, rather than in space. The principle which I have employed involves mathematics higher than any which you have yet had, but which you can some day master, if you follow my advice. I can summarize it by saying that I have discovered how to slow down the universal increase of entropy within the bounds of that machine—also how to make time tangible by multiplying the fourth dimension by the square root of minus one.”

Worthey faced the old Professor, put his hands on his hips, and cocked his head on one side. “Now you're beginning to make sense,” he asserted ruminatively. “I remember you sounding off in class about Eddington's theory that entropy is what makes time one-directional; so that, when eventually the entropy in the universe reaches its maximum, the universe will have run down, and there won't be any such thing as time any more. Also that the only thing about time that is any different from space is the square root of minus one.”

The Professor's pale blue eyes widened. “I'm amazed to see you agreeing so readily,” he murmured. “Well, now do you believe in my time machine?”

“I'd like to see the darn thing run,” Worthey challenged.

BUT Professor Tyrrell shook his white head. “I don't like to use up avail-

able stopping points," he explained. "Remember the rule? A time, once visited, can never be revisited."

"That suggests another snag," said Worthey. "What happens if your contraption lands you in a *space* where there is already something else?"

Tyrrell smiled. "Again we are saved by the handy rule against unsportsmanlike conduct on the part of Nature. I tested that situation too with my little model, before I dared try traveling in the large machine myself. For some unknown reason, whenever the machine arrives in space already occupied, it will side-step the obstruction. Come, I'll show you. It'll be worth using up one more stopping point, to demonstrate this characteristic."

He crawled through the shimmering distorted maze, sat down on the tractor seat, took a short control-lever from his jacket pocket, and fitted it to a boss on the instrument-panel in front of him. "I'll go back a hundred years, and then return to about half an hour later than my starting time. Meanwhile after I leave you push that large packing box into the space where the machine now rests, and which will shortly be empty. Then stand back in the doorway and watch. All set?"

Dubiously, George Worthey nodded. What was the old fool going to do? The Professor smiled at him through the glass walls, notched the controller—and the time machine began to shimmer and fade away. In half a minute—an interminable half minute—it was gone, completely gone. Worthey didn't know what to make of it. Had the Professor really gone on a jaunt through time? There could be no other answer.

Maybe he had just made himself invisible? But no — he passed a hand through the space where the time machine had stood, and it was empty. Oh yes—the packing case. Worthey could

just see Old Tillie returning to the same space, smacking into the case and dying pierced by several hundred riven splinters. But he pushed the case into position and waited. So Old Tillie really knew something. . . .

A half hour later, to the dot, the time-machine, with the smiling Professor Tyrrell seated at the controls, materialized out of nothingness just barely to one side of the wooden box.

"There, you see!" the Professor said calmly, getting down off the seat, and crawling out from the maze of glass-enclosed silver and crystal and coiled wire. "And now would *you* like to take a trip?"

Worthey nodded, but he was terrified at the prospect. Terrified—of what? he asked himself. Of something this ancient fossilized Professor had dared to do? Time travel, hell!

Yet he temporized. "Just why did you pick me, instead of one of the faculty?" he murmured.

"How quiet you are, George," said Tyrrell. "I'll tell you why. For two reasons. First, you are unlikely to try to steal either my ideas or the credit for them. You are a sportsman, and so wouldn't steal if you could. You are not yet a graduate physicist, and so couldn't steal if you would. Second, it will take a man of courage to penetrate very far into the future. And from the way you behave in class, I know you have courage. I went forward a thousand years once." He shuddered. "It was most unpleasant. Well, get into the seat and I'll show you how it works."

Worthey eased his long lanky body gingerly through the shimmering maze, and hoisted himself into the seat. On the instrument board before him was merely the single controller-handle, set at neutral, with notches extending to each side; and a series of dials marked "*HOURS*," "*DAYS*," "*YEARS*,"

"HUNDREDS," "TEN THOUSANDS," "MILLIONS."

Tyrrell explained: "To the right is forward in time. To the left, return. Set all the dials to zero." Worthey set the pointers. The Professor continued, "Go forward at least two thousand years, so as not to conflict with any of *my* trips. Take careful note of how far you go. And return *tomorrow*—understand—so that the *DAY* dial registers 1. Not a bit earlier, for I'd hate to lose my time machine because some smart aleck had the temerity to violate a fundamental law of time-traveling, just to prove that he knew more physics than I."

"And I'd hate to lose my life, Professor," Worthey grinned. He was taking heart already. It was simple, after all. "No danger. Well, here goes!" He shifted the handle one notch to the right.

The time-machine began to throb. A dizzy sensation, as of falling, engulfed him. He gulped, shook himself, and closed his eyes.

WHEN he steadied and opened his eyes again, all was dark. But, a minute later, dim daylight filtered in through the cellar windows. Then broad day. The *HOURS* dial read 10.

He shoved the controller another notch. The *HOURS* pointer spun. It was dark again.

Another notch. Daylight and dark succeeded each other in rhythmic cadence like the ticking of a watch.

Another notch. A blurred buzzing gray twilight. Exhilaration seized him. Why not go clear on to the end of the world, and see what was waiting in store for man? For he suddenly recalled a sonnet in divided rhyme, in which someone had paraphrased Wells's description of the furthest point in the future to which the time-traveler went

in his story. *

George Worthey decided to view that scene for himself. And it wasn't a bad idea to check up on Wells, either. So he slammed the controller way over. His senses reeled, and he pitched forward against the control panel.

When his brain finally cleared, all the pointers were spinning except the *MILLIONS*, and that one was moving steadily forward: one million, two million, three million. Worthey was out in the open now, in a pale world, illumined by a golden band of light which stretched across the sky from east to west, and which pulsed rapidly northward and southward as the years fled past.

Gradually this band of light widened and reddened and became less luminous. It ceased to pulse. It concentrated on the eastern horizon, and became a huge red ball, hanging there motionless.

Then it was that Worthey slowly notched back his controller, and came to a halt in time.

More than two hundred million years had passed, and the world as he had known it was dead and gone. The time-machine stood on a rocky spit of land, jutting out into a listless sea. Not a living thing, not a plant, not even a lichen, did the rocks contain. The slimy edge of the sea crawled maggot-like. A hollow soundlessness hung over the world. An unutterable chill and gloom

* The sonnet George Worthey had in mind runs:
*"Now tide and time and life at last have died.
 The air is bitter thin. Known sounds are mute.
 Inexorable the silent stars shine bright.
 The sky, no longer blue, is inky hued.
 The tidal drag the spin of earth has stayed,
 So that our sphere is settling near the sun,
 Which now hangs motionless and red and plain.
 Life has receded to the slimy mud,
 From whence it first emerged. A gloom most sad
 And chill pervades the air. Pink snow drifts in,
 Dyed by the dying sun. Upon the flat
 An oily swell laps listlessly. God hid
 The aim and end of His terrestrial plan:
 For THIS He made the earth and peopled it!"*

—Ed.

pervaded everything. George Worthey shuddered, but more from the ominous feel of things than from the actual temperature, cold though it was.

Dark indistinct clouds gathered, ruddy on one side like the smoke of a train when the fireman opens the fire-door to shovel in coal. Snow began to fall—large flakes of pink, “dyed by the dying sun.” It was too close to the lines he remembered.

He had seen enough. He did not even care to set foot on this barren land of things to be. Shuddering once more, he notched the controller to the leftward, and the catapulting return through time began.

At last he shook himself together. Why should he, or any other man, worry about the dim distant future, millions of years after the human race would have become extinct? He himself especially, in the midst of a pleasant life? And with the fraternity dance that night.

Ye gods—the dance! That night. He would miss it completely if he literally heeded Old Tillie’s admonition to return to the present world one whole day later than his departure. Why not just a few hours later? Who did Old Tillie think he was? In fact, why not just a few *minutes* later? Then he could get a good night’s sleep. He felt very tired—in need of a full night’s rest. Almost was he tempted to return that afternoon, rather than evening, so that he could get plenty of sleep. How tired he was! His head began to nod.

With a start he pulled himself together and glanced at the dials. The *MILLIONS* pointer was just slipping under 1. Hastily he notched back the controller. Less than ten thousand years now. Less than a hundred years. Less than a year.

Fascinated, he watched the days of the current year reel backwards. Less

than a day now. The controller handle was at its lowest notch, as the hours slowly reversed. Already he had disobeyed Professor Tyrrell; he must watch out and not overdo it. He must stop before all the dials read zero, or poof! Annihilation!

PANIC stricken at the thought, Worthey slammed the handle forward just past neutral for a moment, so as to use his motor as a brake. The *HOURS* dial slowed.

Reassured by the certainty that he would stop definitely later than his starting time, Worthey felt new annoyance about the dance. Suddenly he was entertaining the impish idea of traveling on exactly to his starting time. He would show up Old Tillie, he would; he’d make a laughing stock of him. What possible harm could come of returning exactly to his starting point? What did the old boy know, after all?

With sudden resolution, George Worthey notched the controller backward again for an instant, and then to neutral just as all the dials read exactly zero.

From somewhere he could hear—

THE question is—what did George Worthey hear? And what, exactly, happened to our unpleasant friend, if anything? Did he return to disprove kindly old Professor Tyrrell? Did he discover a new law in the “sportsmanship of nature”? Or did the Professor’s grave warning have teeth in it?

That, as Hamlet said, is the question: What happened to George Worthey when the time machine reached the zero that stood on all the dials?

CAN YOU ANSWER THAT QUESTION?

Then turn to page 5 for complete instructions on How to Win a Big Cash Prize for the best answer.

GIANTS OUT OF THE SUN

By PETER HORN

"THEY die like flies," he said to me. "*Senor*, we do not know what is 'appening. But in the 'ospital here in Huayopata the newborn children, they die like the flies. For three weeks, not a single new baby lasts more than an hour. Why? No one knows. Dr. Dean, he thought he knew, and what 'appened? He went away before he told anyone what he knew."

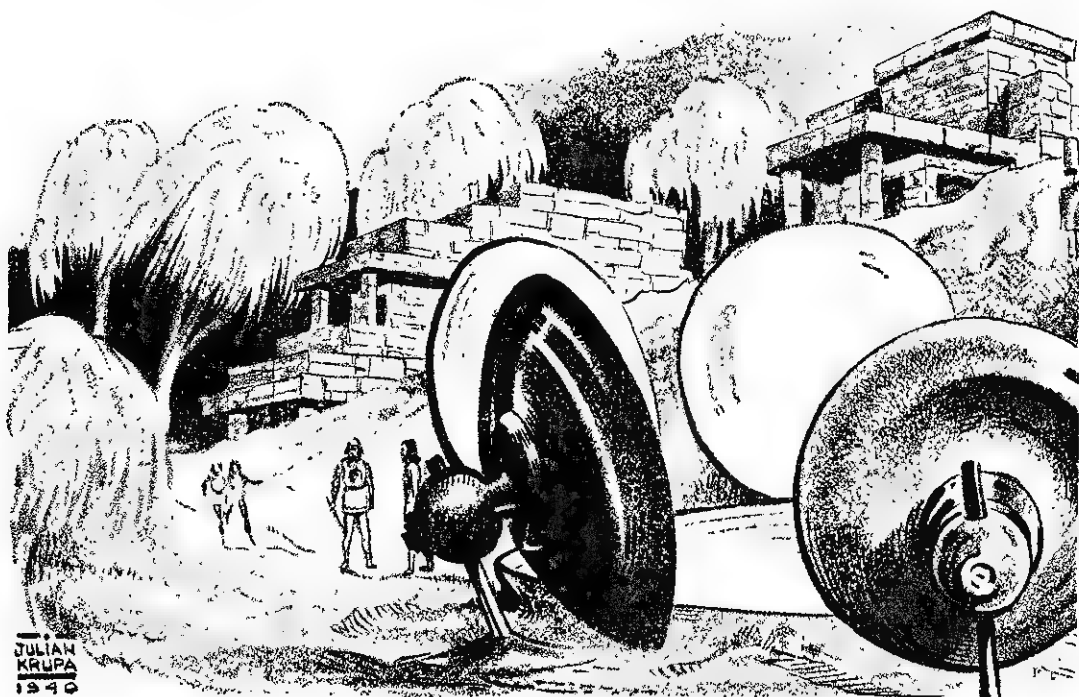
"Well, Dr. Alfarez," I said, "I still don't know what it's all about. Ed Dean worked beside me for three years. If he said he knew something, rest assured that he did."

The dark little doctor shrugged.

"Like flies," he said, in his melancholy way. He picked up the loosely held together notebook. "Here is the book he 'ad in the 'ospital desk, *Senor* Thompson. Per'aps it will 'elp you."

It didn't help at all, except to confuse me—yes, and it did more than that—it frightened me. The book was full of scattered little observations of all sorts, along with the documentation of his experiments. Here was a fragment of a formula, there an isolated line: "... Might be a deficiency of D vitamin to hyper state . . . nonsense of course but babies appear to be *burned* internally . . . might investigate effects on dogs,

What grim terror lay in Peru and what did Edward Dean have to do with the giants?





The giant palm lifted me up until I was on a level with the Incas

cats, etc. . . ." Or the short paragraph that was unfinished: "Dr. Alfarez has no inkling of the relationship between the deaths and the geographical distribution—"

Of course, Alfarez had read the notes, but they had not helped him. What had he made of the further note which said something about: "It seems to be moving in an almost perfect circle. If this is true, then the consequences may be more terrible than any living man can foresee." That was what frightened me originally. I had worked beside Dean, and knowing him, I could not imagine what circumstances could possibly have made him write a sentence like that. He was a cool, sane scientist, and his work in various fields of research medicine had given him a brilliant reputation.

Yet he had written that ominous phrase; it was in his neat, precise writ-

ing. As far as I knew, the evidence was all around me. A little town called Huayopata in the center of Peru had found the infant mortality rate increasing at a terrifying rate. When Dean went down to investigate it for the Rockefeller Foundation, he plunged into work so completely that in three months he had no time to file reports, and he had dropped me a noncommittal card. Then suddenly we received word from Alfarez, the head of the local hospital, that Dean had disappeared and did we know anything about it.

We didn't. And when another month went by with no word from Dean, and increasingly alarming letters from Alfarez, I was sent down to do a double job; help Alfarez and help the consulate in Lima. They were looking everywhere for Dean.

I went first to Lima. The score of clerks, busy with the various fiestas

IMPORTANT:

The history of this manuscript, presented here as fiction, is one which will undoubtedly interest the reader. Some two months ago, a friend of one of the editors wrote him about a man he had met in New York, through a common acquaintance. This man, referred to as Mr. X, since, for good reason he has insisted that his anonymity be preserved, had in a short period earned a queer reputation, and his general behavior alarmed those who knew him.

Some months before he had gone to South America to hunt for a colleague who had disappeared somewhere in Peru. He returned without the man he had gone to seek, but he told one of the strangest stories this friend of our editor had ever heard, and he immediately wrote us, suggesting that we might be interested in it.

Here new complications arose. Mr. X had told his story so often, and with such thoroughly bad results, that he had resolved not to mention it again. He knew that even intimate friends of his believed that he was no longer quite sane, and that they ascribed this to the harrowing experiences he had suffered in the South American wilds. His despondency and resignation

were amply illustrated when he let two urgent letters from our offices go unanswered. Finally, we wrote to Peter Horn, one of our writers who lives in New York. To make a long story short, he went to see Mr. X, and after much diplomatic maneuvering, succeeded in getting the story.

We are presenting that story here. All names used are fictitious, of course. It is presented in fiction form because this is essentially a magazine of entertainment. The editors are curious, however, to see how the reader will react to the various facts mentioned by Mr. X, almost all of which can easily be verified. Some of the news clippings to which he refers, for instance, bear him out to lengths which must prove thought-provoking. Or, perhaps they merely coincide with his story to a really astonishing extent. The editors of this publication are sincerely interested in hearing from anyone who may have either contradictory or substantiating facts. The day may come when Mr. X may be asked to drop his anonymity, and tell his story publicly, because of new and terrifying developments—but that we leave for you to decide.

—THE EDITORS.

and siestas, gave it up. Maybe, they said, he had fallen in love with a half-breed and run off to Brazil with her. Maybe a snake bit him and he fell into the river. I went to Huayopata. This was October, and the South American summer was like a scorching blanket laid over the land. All around me, unknown to the world at large, or even to other cities in Peru, death walked unhampered. I knew I was a child at the game three days after I went to work. And after reading what Dean had said, I knew the best answer to the strange plague was—find Dr. Edward Dean.

TWO days after I had gone through Dean's notebooks—a mother had committed suicide that day in the hospital when her baby, born of a Caesarean, died immediately afterward—a note came from Lima. The consulate officials had contacted someone in Cuzco who said

that a man answering Dean's description had stayed overnight at a hotel there, and had gone out early the next morning, dressed in clothes that suggested a trip into the interior. There had been two native pack-carriers with him. The natives had not been seen since, and it was supposed that they were still with this man who looked like Dean; thin, hawk-faced, and very tall—not a difficult man to remember.

But there was a map too, something that had been found in a drawer in the desk of the room where Dean had stayed—for I knew it was Dean the moment I laid eyes on it. There was his own handwriting scrawled in several places. It was a map of the country surrounding Huayopata. Dean had marked two places *HERE* with maltese crosses and put question marks after them. Radiating from both these places were conflicting lines, like waves, and the ends of the lines were curled, in the manner of an engineer signifying a wavelength.

And here there were more notes,

one about a light ray unfinished, on the map. But there were other conjectures about plant life, about spore formations, about disease germs on the rivers—and after each little town in the vicinity was a record of the number of . . . of what?



Dr. Edward Dean's Map

When I asked Dr. Alfarez about it, he said he knew nothing. It seemed obvious that Dean had tried to tie up the infant mortalities in the surrounding towns with Huayopata, but if so he had not told Alfarez about it. And who was Herbert Gottlieb?

Only one thing was certain. Ed Dean, for reasons he had kept to himself, had gone into the Peruvian wilderness looking for something that he

felt too dangerous to talk about. And whoever wanted to find Dean would have to go after him. The map said, *START HERE*, pointing to Cuzco. That was where I would start. I was going to follow Dean into the interior.

Before I left, I sealed Dean's notes and his map, together with the circumstances under which I had gotten them. I left instructions to forward them to my superior officer at the Foundation if I did not return within three months.

I went to Cuzco, listened to a lot of advice from the consular office there, and hired a young half-caste Peruvian Indian boy to tote my baggage. And then I started. Where? In the general direction of the maltese crosses, heading for the first one. There was no road, no path, no markings, nothing. But I had to find Dean. I had to know not only what had become of him, but what was going to become of those babies dying in a little town in Peru . . . and the "consequences more terrible than any man could foresee . . ."

WE were three days out when the young lad with me, named Palo, wanted to turn back. "I have fear for these places, *Senor*," he said. "I come from these mountains, only more so north. My people run away many years ago. Great devils live here." This first sign of his fear ended in my doubling his pay. I was sure then that he had only played me for the money.

Four days later, he balked again. It took me hours to get him to go on. The mountains were wild and desolate. For more than an entire day, the day before, we had made our way through a totally dead forest. There had not been the slightest sign of any life there. Not even a weed, a blade of grass, a leaf. It was as if the hand of death had paused there. Even money would not budge Palo, but the advice from the

consulate did. I took out my gun and threatened to shoot him on the spot if he did not at once resume.

We went on another day. With each step the earth seemed more bare. The cloudless sky was alive with heat, but in an area where the land should have teemed with tropical life, there was silence. There were no birds, and after the days of trekking through forests filled with wild music, the quiet seemed full of foreboding.

Then ahead, the land seemed to end. In a few minutes I saw what it was. We were approaching the edge of a gorge, and we would have to circle on its rim. As nearly as I could tell, we were but three days from the probable location of the first maltese cross.

In the glare of the sun on the dark earth I made out a white object lying several hundred feet ahead. I was half-way to it when I broke into a run. When I reached it I could hardly pick it up, for my hands were trembling. It was a white pith helmet, the kind I was wearing.

I bent over and lifted it. Inside were the initials: *E.D.*

I had come long, torturous miles to find that helmet.

When Palo came up and saw what I held, he unstrapped the bags and stood there before me. He kept his large brown eyes on the ground, and in the tropical warmth, he shivered in his rags. "*No voy, Senor*," he said. He wouldn't go on.

I walked farther, to the edge of the precipice. The gorge sloped steeply away, parting farther on to form a huge valley that seemed circular in shape. Ten feet from the top of the valley, and filling it, were great misty clouds. It looked like an immense bowl filled with a milky, swirling mist.

Suddenly I started and moved back an involuntary step. For a moment I

had fancied seeing something move in that mist—something huge and glassy, with . . . and then I laughed. I laughed partly to reassure Palo, because he had come up the moment before, and partly to reassure myself. The clouds had taken a form too fantastic to express in words.

"Well, Palo, are you coming?" I said.

"No voy, Senor, por Dios—don' go!"

I shrugged my shoulders. There was but one way now, for the fear in his eyes was greater than he had shown for my gun. I would have to play on that fear. "Goodbye, Palo," I said, going back for the packs.

He watched me go to the very edge of the plateau, where some thirty feet below, there was a sort of cut-out path in the rock. I swung over the ledge and started down the descent, then looked back. Palo called out, incredulously, "You go alone? You leave Palo?" I said nothing and continued climbing down to the path.

When I had gone some twenty feet, I glanced back. Palo was setting foot within the gorge, following me gingerly. Still I kept climbing down, though slowly, waiting for the boy to catch me.

Then, all at once, I heard Palo scream, his voice like a single, high-pitched string quivering in the stillness. I looked up to see him tottering on a ledge, but both his hands were stretched out before him as if he were warding off something—

And turning, I saw it too. I will never forget that one terror-filled moment. It was as if I had ceased living then, for I stood like a stone, seeing that monstrous apparition take shape as it came up out of the mist. Little by little it emerged—first, a huge hemisphere of glass under which I could see several men clad in the costumes of the ancient Incas. The glass rose higher

from the swirling whiteness. It was the top part of the skull of a man of truly gigantic proportions. His nose alone must have been five feet high. The top of his skull was missing, and the glass took its place.

Now the eyes turned toward me. Great, bloodshot, hollow eyes, dark as night, their pupils as large as a man's head, they came closer. The cruel lips, with fanged teeth protruding, moved slightly. The whole head had emerged, a horrible, great, discolored blue head. I could see the men inside the glass skull plainly now, moving among a mass of red wheels and machinery, touching levers, evidently guiding the monster.

From out of the clouds a huge hand swept up past me. In an instant it had come back, and it was holding Palo. The great fingers curled and lifted me gently, laid me in the palm of a hand, and held me there.

In the minute that the whole episode had taken, I had not moved, nor had the thought of defending myself, or using my gun, even occurred to me. The giant was moving now, walking. Dimly I realized that from the rocking motion.

CHAPTER II

The Unknown City

I THINK I must have lost my mind temporarily. I remember the wild thoughts that surged through my brain; suddenly I was insanely frightened and all I could think of was killing before I was killed. I rolled over on my side and drew the heavy automatic I carried, and lying on my back, I pointed the gun at where I imagined the giant's head to be. Already I could feel him crashing to earth, and I was preparing to fling myself clear.

I was waiting for the dense, steamy mist to clear a little, to make the first

shot count. It was impossible to see inches away; even Palo was invisible. It was during that wait that reason returned, that the first coherent question posed itself to me. What could all this possibly be? I could hardly deal with concepts of such enormity, of such unbelievable creatures. Then I felt something warm and sticky wet around me.

The next moment the great hand was lifting us up over the mist, and there were the horrible eyes looking at us. Now I could make out the men in the glass skull more plainly. They wore silken garments of bright colors, and their faces were grim and intense, pointing to us. I looked to Palo and saw what was happening. He had taken the long knife he carried and had half cut away one of the giant's fingers! I realized then what the sticky liquid was—the giant's blood!

Now, terrified at discovery, the youth cried out. I waited for the fingers to crush us both to quick death. Instead, the giant's other hand came up through the clouds. The great fingers hesitated over my head, then came down and touched my hand. The automatic—I was still holding it, and though the giant wanted it, his fingers were too large for him to be able to take it without hurting me. The men in the skull were regarding me intently. I nodded my head and laid the gun in the giant's hand. Then I took Palo's knife and gave that away too.

The hand turned over and the weapons dropped out. Then the injured hand, moving like a great steam shovel, deposited us gently in the other hand, and the giant resumed walking as he lowered us again.

Two things stood out in my amazement, oddly enough. First, the gentle treatment that we had received, even though Palo had severely wounded the giant. Second, the strange fact that the

giant had not realized what was happening to him until his finger was almost gone. And there had been no cry of pain. Could the giant utter any sound? Had it been necessary for the men in that great glass skull to discover the wound?

Palo was crying. I could hear his sobbing over a subdued crashing sound that must have been the giant walking. I wanted to say something to comfort him, but I didn't have the words. I think it would have been a relief to me to be able to cry then too, but I couldn't. I was too frightened, too wonderstruck. I still had not really comprehended all I was seeing and all that was happening; it was too enormous for that. Moment after moment I was coping with the events slowly, trying to understand. . . .

The sun came through with sudden brilliance, and the mist had disappeared. I looked through the fingers that held me. We had entered a city of strange design, a city which from my height seemed to cover some four or five square miles. But it looked like a toy model, for the trees that marked its boundaries were easily five hundred feet tall. There were people below, men and women and children, in avenues to one side of the broad lane on which the giant who held us was walking, and they looked very much like those in the skull.

The buildings were all of exotic architecture, not unlike those unearthed by archaeologists in Central America, huge, monolithic stone structures, with animals and birds carved on them. Walking through this city toward the center, the giant seemed like an automaton. His steps were cautious and measured.

With this latest development a new calm settled over me. Too much excitement had had its effect; my brain could

absorb no more. I had been shocked too many times within a few minutes and I could react no longer. In this calm, I estimated that the giant was somewhat over a hundred feet tall—and he was heading directly toward two other giants who had appeared and seemed to be waiting for him.

THE other giants were shorter, but otherwise they were like the one which held Palo and me. They wore great golden tunics, with an emblem like the sun emblazoned on their breast. The muscles that played beneath their blue skin were heavy as steel cables, and now I saw how they responded to the touches of the men in the glass skulls, as if they were machines. But they were alive. I knew that, for I had heard the giant's heart beating like a nearby drum when he had lifted us to his eyes.

Now, for the first time, the people below noticed that the giant was holding us. They gathered in idle groups and pointed, looking up. The giant was holding his injured hand in his mouth, sucking his injured finger, while the honey-colored blood ran down his lips.

Suddenly he began rolling his head, and a loud moan like the distant rumble of thunder came from his lips. His body began to sway from side to side. He took the finger from his mouth, looked at it, and again he moaned. Below us I saw the people who had been standing by moving quickly away.

An instant later they were running in a near panic, for the giant, moaning louder now, was stamping his feet—and all at once he broke into an uneven lope. He was clutching me closely now, and the world was rocking crazily. In quick alarm, I looked up to the skull. The men there were moving swiftly, and my own fright was mirrored in their expressions. The giant was running wild!

The earth was echoing the sound of huge feet beating their tattoos, but there was more than one giant running—the other two were after him! The screams and shouts rose up like a blanket of sound from below. Miraculously the giant stepped over buildings, reached another wide path and began running faster. The center of the city was looming now, and as the hand that held me swung, I made out a vast area of brilliant light, seemed to see a small, perfectly circular lake that shone like molten gold. But these were fleeting pictures. I swung as if on a pendulum . . . great tubes, cylinders, trees . . . there were other giants coming swiftly toward us. . . .

They had caught him! The giants behind had reached out and seized the wild one by his arms. His hands had abruptly stopped their swinging, and the jar almost shook me to bits. With a deafening roar, the crazed giant wheeled, tearing his arms loose and raising them over his head as if to bring them down in a blow. The smaller of the other giants swiftly seized the arm that held us, while the other drew close and hugged his chest. The small giant seemed to be trying to reach the wild one's head.

The veins on the wild giant's arms stood out as slowly . . . so slowly . . . he broke the grip on him. Then, swinging his arm back—I knew what he was doing—preparing to hurl us . . . away!

At the top of his swing, another hand caught him. The giants from the rear had come up. Suddenly, for some inexplicable reason, the giant lost all fight. I felt his grip relax—too much—we were rolling off—falling! I remember spinning over in air, falling down an expanse of orange, Palo's shriek like a knife cutting through the sounds of the melee.

A cloud swept through the air, enveloping me, crushing me, then relaxing as it shot upward again. I had been caught by another giant!

But I had seen Palo hit the ground, seen him clearly as I fell, seemingly hanging in mid-air. And I had seen one of the giant's feet step on him and crush him to an instantaneous, horrible death. . . .

The nightmarish scene slowly righted itself. The wild giant seemed subdued, the others milling around him. The eyes of every one of the men in the glass skulls were on him, but the strong, dark men within the wild giant's skull were moving about calmly, surely. The giant turned away, and his great legs carried him off in prodigious steps.

The monster who had caught me was relatively small, perhaps sixty feet tall, but he was less the automaton the other had been. Now he held me up to his eye level and grinned grotesquely, as if he understood what had happened.

The men in his skull were moving a little machine in the front of the glass enclosed dome, watching me as they spun around something that looked like the eyepiece of a telescope. Suddenly, from the eyepiece, a weird coppery light flashed directly into my eyes.

It was as if an overwhelming fatigue had suddenly descended on me. In the midst of an experience so strange and terrible and incomprehensible that few connected thoughts had come to me since the nightmare had started—I yawned! I couldn't keep my eyes open any longer. Vaguely, I was thinking I had been hypnotized . . . that the copper light had done something. . . .

WHEN I awoke I was in a small windowless hut, but light was streaming in through an open doorway. For several moments I lay there, absolutely still, while recollection flooded my

mind. What was this strange, unknown world? What had happened to Dean? The helmet had been lying on the brink of the gorge. Did that signify that Dean had been taken by the same—but Dean had suspected something—he had come searching for something. . . . Could it possibly have been that he had known of the existence of these people?

Bewildered, wondering what had happened to me, uncertain where I was, I rose and made for the door, which seemed unguarded—and almost killed myself! The earth was a hundred feet below me! I barely clutched the framework and staggered back, shaken to the marrow. Lying on the floor, I stuck my head out and looked below. Then I saw what kept the hut elevated. It was perched on top of a branchless tree, like a birdhouse on a pole. A more effective prison couldn't have been devised. The tree evidently met the middle of the hut floor underneath, and there was no way of getting to it, even if I had dared to contemplate climbing down from that height.

The tree and the hut were situated, as well as I could make out, in the midst of a bare strip of ground. Overhead the sun blazed, and that meant it was near noon—which could only mean that I had been unconscious or asleep since the day before, for it had been late afternoon when poor Palo and I had stopped at the misty gorge. But there was no mist now. There was nothing. Acre after acre of barren earth stretched away, to end with a line of the unbelievably enormous trees. From somewhere the hum and faint stridence of human voices floated up to me like the muffled sounds in a dream.

Another sound came, a scraping that seemed to come from behind the hut, where I could not see it. Looking down I saw something astonishing happen. From out of the bare earth something

had grown—grown in the few moments since I had last looked down—and it was still growing even as I looked at it. It was a sapling, pushing its way up at an appalling speed!

Suddenly a huge hand snaked out and seized it. In a moment it had been uprooted, and the whole body of a giant came into view. As he stood up, I saw that in his hands he held the uprooted trunks of a score of trees. The next moment there was a coppery light flashing at me from the glass skull. I blinked and stared at the golden-skinned men there, and the coppery gleam became more intense.

I was standing at the doorway then, and instinctively I wanted to get away from that light. It made me feel dizzy, sleepy, tired, but at the same time I wanted to fight it. I kept staring back at it until I was unsteady on my feet. In a moment I would fall . . . then the giant had turned and another had come up. The next moment an enormous hand was coming down toward me. I ducked back inside the hut and the hand blotted out all light.

But when the hand moved away a moment later—there before me stood Dr. Edward Dean.

CHAPTER III

Conquerors from the Past

HE advanced to my side and took my hand. There was a month old beard on his face, and he wore white linens, a little faded by the sun. His face was screwed up in a quizzical, tight-lipped smile that was inexpressibly sad. "Hello, Thompson," he said, quietly. "I felt it would be you who'd come."

I rubbed a half numb hand across my face. "You're alive then," I whispered, grasping him.

"Partly," said Dean, that same smile on his face.

It was queer, hearing him say that, and seeing the expression on his face when he said it. "Dean," I said, "what is this all about? What does it mean? Where are we?"

Dean almost laughed, but lines of pain covered his face.

I just looked at him then, and he said, quietly, "I'm drugged, you know. Not enough not to realize it, but just the same, I've been slowed down. Part of their technique. Same sort of thing that hit you a couple of seconds ago." He turned to the doorway and waved an arm. The giant who had placed Dean in the hut, extended his hand and Dean stepped onto his palm. I followed him at a sign.

The giant's fingers clasped us lightly and he began walking in a direction opposite to the one which the doorway of my hut had faced. "Dean," I said, "what are you talking about?"

He looked away from me, his face pale and haggard. "I don't know," he muttered. "I'm going crazy."

A strange fear had come to me from the moment I had laid eyes on Ed Dean. I didn't know what it was—the things he said, or the way he said them, or both. All I knew was that I couldn't speak anymore. It was just as well. Dean had fallen silent, his eyes still averted.

After some minutes, the giant walked through a thick curtain of trees whose branches were like a canopy, and there lay the city of these unknown people. I had only had fragmentary glimpses of it before, but now I saw it in some detail. It was magnificently planned and executed. The buildings were massive, constructed from huge blocks of granite, and decorated with carven images. Twice I glimpsed other giants not far away, but below there were

normal people, people like the dark men inside the glass skulls, except that their clothes were less ornate.

There was something vaguely familiar about them, strange as they were, about their monolithic buildings, something ancient, other-worldly . . . as if somewhere I had seen or read about this land.

The avenues of the city seemed to be circular in one way, and like the spokes of a wheel in the other, and the giant had been proceeding along one of these radial streets, or rather, along one of the great paths that paralleled the streets, for the giant didn't venture near the avenues of the normal-sized people.

The day before, when the giant who had captured me had gone berserk, he had run toward the center of the city. I remembered the glimpsed images of great machines and of a shining yellow lake. Now the center of the city seemed to be near, for the same effect of intensely brilliant light made itself apparent. I wriggled a little in the giant's hand, the better to see.

Then I saw it all: the great cylinders and the tubes and the mirror magnificent beyond belief and the hundreds of machines and—yes, *the giants in the making*. For there it all was in a vast circle in the center of the city, entirely in the open, as it had to be, but there were no people about.

In the center lay what might have been a lake of the purest molten gold. It seemed to have neither surface nor depth; it was as if an infinitesimal piece of the sun itself had dropped to earth to lie there in glory. But it was actually a great mirror, with a surface so perfect that it seemed to merge with the sun it reflected. Surrounding it at several points were huge revolving mechanisms which looked like great searchlights, though they were dark and without any obvious utility. Leading

away from the mirror were myriads of tubes, pipes, coils, cylinders—as if somebody had designed a machine to harness the sun.

The giant walked past the mirror and the great cylinders were before me. Here were enormous transparent vessels stretched in a line that must have numbered a score. There were hardly two the same size. Inside each there was a man . . . or what had been a man—for these cylinders seemed to be *creating* giants! From those containing men who were but a few feet over normal in height, they ranged to others where men were fifty feet tall. And the chambers had been able to expand with their occupants.

As the giant walked by the great file of these chambers, I saw the faces of the men within. They were different from the people in the city; they were ordinary Peruvians, Indians mostly. Their faces were expressionless and they stood perfectly rigid in their glass cylinders. And, as their size increased, so had their skins changed to an ever deeper shade of blue.

“DEAN,” I said, “what is the meaning of all this?”

“Look ahead,” he replied. “Do you see that great dome-shaped building? That’s where we’re going. That’s where you’ll find out all you want to know, and more than you’ve ever wanted to know.” He was breathing heavily now, as if through some exertion. Then he whispered, “Be patient, Thompson. I’ve been drugged for days. I’m trying to recover my senses. There’s a lot I have to tell you.” He had covered his eyes with his hands as he spoke.

The giant came to the great dome-shaped building, set off from the others by an expanse of white stone, and then he lowered Dean and myself to the ground.

Immediately a tall man, dressed in a bright red garment like a tunic, came from the building and escorted us in. Dean and he seemed to know each other, but they spoke little as we walked through enormous halls. There were not many people about, but those who were there stopped to look at me in astonishment. What speaking I did hear was all in an elaborately foreign tongue, which was no clue at all. The walls were all heavily decorated with bas-reliefs and murals, depicting what must have been historical scenes, and in many of them the sun appeared to be playing a large part. The entire place seemed to be in excellent taste, furnished for kings, and conceived by minds that were learned.

We came then to a large wooden door studded with golden ingots. Our escort went through, returning in a moment to motion us to follow. Inside was a single chamber. The floor was marble, and the sun lay on it bright ribbons that flowed from numerous and immense windows set in three walls.

At the far end three men sat on short chairs. Behind them a map covered almost an entire wall. As we drew near, I saw that it was made of precious stones, and that it appeared to be a map of the world—or at least, of South and Central America and other lands. But the other places were poorly executed and full of errors. There was really no conception of the size of the world, or of its shape, and the South American sections were abnormally large. A huge ruby glittered at one point, which from its general location, I took to be our present spot.

The three men were not old, yet their eyes seemed almost ancient. They sat easily, their arms on the square arms of their chairs, dressed in loose gowns of a linen shade. Each had the same insignia embroidered there, a bird, half-

concealed in a basket. Their faces were dark, and though they differed from each other, they shared in common a regality that I had seldom seen. The one who sat in the center, a pleasant-faced man with an aquiline nose, nodded.

"Welcome once again, Dr. Dean. This is your friend?"

Dean nodded. "This is Dr. Ivar Thompson," he said.

"Welcome to *Tampu-tocco*, The House of Windows, Dr. Thompson. The Inca people consider you their guest."

"Inca?" I blurted.

It was as if the ground under my feet had moved. *Inca*. A nation that had been dead for hundreds of years. . . . Was this the explanation for the strange familiarity I had felt, the feeling that I had known—

"Yes, Dr. Thompson, we are Incas. I am Auca, and these are my brothers, Uchu and Cachi. We are the descendants of the original men whose names we bear, and our people are the remnants of the great nation that once ruled here."

"I don't understand," I said. "Why are you hidden away here? What are these giants? What does—"

"I am sure Dr. Dean is anxious to tell you, and I leave what I know is an unpleasant duty to him. Meanwhile, I offer you two alternatives. You may stay here with us and live as a useful member of our society, for we have use for doctors. You will never leave the valley until the conquest is accomplished, and you will be drugged at periodic intervals when we hold our religious ceremonies."

He paused, and I said, "Never leave here? And what does this talk of a conquest mean? Surely you don't intend warring on Peru?"

"Not Peru alone, but the world."

HIS statement stunned me. I turned to Dean, but he was looking at the floor. "It's insane," I said. "Do you think even these giants can possibly conquer the might of the civilized world? And why should you even want to—"

"Please, Dr. Thompson, I have no desire to discuss the matter with you. I know from Dr. Dean how different our views are. I do not ask you to help us as a combatant, but I must tell you that if you do not agree to live here peaceably, then the alternative is a painless death. I hope you will choose the wiser course."

"But this is—"

"I know it is a shock, Doctor. You can have until tomorrow to decide." With that, he and the two with him nodded, signifying that the audience was finished. The man who had escorted us into the chamber started walking out. Dean tapped my arm and followed, and I went behind him.

Once outside, we were left alone. We went out of the building and into the street. "Dean," I said, "you've got to tell me now. I can't understand this at all."

"Listen," Dean said, "and listen carefully. I told you before that I had been drugged. They do that by shining a light in my eyes, a copper light that seems to paralyze me. Now I'm watched all the time I'm conscious."

"What's happening here?" I cried. "I can't understand any of this. What made you come here? Are these people really Incas?"

"Come with me to the center of the city. The answer lies there in what seems to be plain view. But there is a mist, which, viewed from above, obscures everything, while here it is nothing. These people are the descendants of the original Incas, as well as I know. Their plan is diabolical enough to be-

lieve anything."

We went to the center of the city. Before the great mirror, Dean stopped and said, "This is called *Paccari-tampu*, the House of the Dawn. Do you know what these cylinders do? You can see only the *results*—which are the raising of these giants. But they are merely an after-effect. They need the giants, true, as a temporary guard. The Incas are taking some vital power in the sun to do it—and they're taking it away from the rest of the world! The Incas have hidden here for hundreds of years, nursing a hatred for the world which destroyed their race, which enslaved them. Their scientists were as great as their architects. For centuries they labored secretly, until they found something in the rays of the sun that means life itself. I can't go into this because I don't know everything yet, but they have isolated that function of sunlight which activates chlorophyl—and which keeps all life going on earth. It isn't merely a question of minor matters like Vitamin D, or the violet rays. Those are facets of a larger discovery—one our own world knows nothing of.

"They've gone further. They've found out how to absorb those vital rays, and keep them from life. You saw the immense areas of desolation for miles around here? That's because this mirror and these machines have taken life away from whatever lived. Did you see what has been happening in Huayopata? That's because it has begun to affect all life—even humans."

"Dean," I said, "do you mean that what's killing those babies is here?"

CHAPTER IV

The Plan of Dr. Dean

"YES. And that's only the beginning. They've been working on

a mirror farther in the valley. I've never seen it, but it completely dwarfs this one. It will be large enough to kill everyone on earth, not quickly, but by degrees. Bodies will waste away, but before they die, all food, all vegetables and plant life will have died. The newborn babies have been going first, because they're the weakest of all living creatures."

It's difficult to describe what these words did to me. They struck me like my first glimpse of the giants; it was too much to understand quickly. But as I realized what Dean was saying, I was filled with more fear than I had ever known, but a new fear, one completely apart from me.

"You see what drew me here," Dean was saying. "I was baffled by my experiments at the hospital, but when I tried coordinating the occurrence of these cases, one thing stuck. There seemed to be a central point of dissemination. I thought it might be a new disease, so I came alone. Had I suspected—but how could I possibly have dreamt of anything like this?"

"But why should they want to do anything like this?"

"Because the world of our forefathers killed them, conquered them. Because men like Pizzaro slaughtered, and they believe we are barbaric. Not actually. Auca, for instance, has attended Oxford. That map of the world behind him—they know better than that; they retain it because it was their ancestor's conception. But they are a peaceful people and they consider others as war-makers. Sooner or later, Auca says, the world would again try to kill his people. Therefore, they must kill first.

"But you see there is no malice in them," Dean continued. "They will let us both live because they have nothing against us as individuals. They fear

and hate us collectively, as a civilization. These giants of theirs are ordinary Indians whom they kidnap from surrounding tribes. Since the absorbed sunlight must go somewhere, it goes into them, and they are almost a waste product—except that they form an admirable police body.

"You have seen how the large ones are controlled by what amounts to an artificial brain. The human brain cannot coordinate so large a body, but even a machine which is a thousand times more crude does it well enough. The giants perform a duty which is indispensable to the Incas: they keep plant life and trees from a natural tendency to grow here in such profusion that they would overwhelm the valley. Only the boundary trees are allowed to grow to any extent. A handful of seeds or spores dropped in the soil here would grow overnight into an immense jungle, but the area is kept free by the strange mist which kills most of them, and by the giants, who uproot the few which survive the mist."

When Dean had finished speaking, I was silent for a few moments. Presently I asked, "They offered you the same alternative they did me, of course?" Dean nodded. "And you chose to stay here?"

"I chose to live. As long as I'm alive, there's a chance that I'll get away in time to spread the warning. The best plan would have two sides to it. First, the terrible demonstration of the latent powers of these infernal mirrors. The world must be shaken into realizing something's happening. Second, someone must explain what will happen when the mirror shows its power. Several days ago I tried at last to escape. They caught me, drugged me. . . ."

Dean stopped suddenly. "I've been meaning to ask you," he said, "whether they hadn't shone a small copper light

in your eyes?"

"Yes," I said. "Why?"

"Because that light is actually an anaesthetic. It would seem to bear out the molecular theory of light, since it actually appears to bombard the retina with matter which is absorbed directly into the brain."

"This sounds a bit confused," I began.

"Never mind," Dean said, hurriedly. "The point is, I know what the light does, even if I don't know specifically how. Now, if they gave you the light, how is it that you were up in time today to almost kill yourself?"

"What do you mean?"

"I mean that when they gave you the light, they undoubtedly gave you enough to keep you under until they wanted to waken you—yet you were awake when I came. Why?"

"Is it important?" I asked.

"**EVERYTHING** is important," Dean said, characteristically. "If you can somehow withstand the paralyzing effect of the light ray, without the Incas knowing it—then you're in a position to try escaping. That's how I got my chance. I made a glycerine film which I put over my eyes, shutting out part of the light. But I was still too tired to get far. Now if we only had—"

"Just a minute, Dean!" I cried. "Do you think the glasses I'm wearing had anything to do with it?"

"What glasses?"

"That's just it; you can't see them. Everyone's heard of them, but when they come across them—look carefully, Dean—don't you see the lenses up against my eyes? They're the new glasses people are wearing, invisible lenses shaped like the eyeball, lying right against it and held in place by the lids."

Dean stepped closer, his jaw tight.

"By God, Thompson, you're right!" he muttered fiercely. "They're a tinted shade, aren't they?"

"A shade smoky. I had them made that way when I knew I was coming to a hot sun country."

"Then that's it! That's the answer!"

"Now what?"

"I've got it all worked out." Dean's eyes were glistening, and his voice was unsteady. "I've thought of nothing else for weeks. All the time I kept saying to myself, 'Have a plan, Dean, have a plan.' Because someday the chance might come and then there would be no time. And I did work out a plan, but I never felt I would have a chance—until now. The fact that you can really withstand—"

"Dean," I said, "I can't really withstand them. I can only recover quickly, judging from what you've told me."

"Look out," Dean snapped. "Here comes our keeper. Slip the lenses out and give them to me. I'll see you later."

I turned slightly to one side and slipped the lenses out of my eyes. Walking toward us from the other side of the great square was the Inca who had escorted us some minutes before. He approached and bowed his head politely.

"I believe it is time for Dr. Dean to return to his patients at the hospital?" Dean nodded to him, and the Inca said, "Then I will take it upon myself to show our city to Dr. Thompson."

Dean and I shook hands, and the lenses were in my right hand then. He turned away quickly and was gone. . . .

MANCO, the Inca, showed me the city for the next few hours. At another time I would probably have been completely fascinated by what I saw, for here were a people who had slept away from the rest of the world

for centuries. The other-worldliness came from their whole attitude, from the way they walked and smiled and dressed, and bought vegetables in the market places, and the way the children played games. It was a curious mixture of a metropolis and a small country town such as one might find, say, in Mexico.

But I saw only with my eyes. Every moment I was wondering what Dean was doing, what his plan was. The evening could not come too soon for me.

IT was toward twilight, and Manco and I were walking in one of the many paved squares, when Dean came hurrying toward us. He and Manco exchanged bows again. "You are aware, Dr. Dean," said Manco, "that Dr. Thompson has not yet made his choice, and must therefore return to his elevated hut for the night?"

"Yes, of course. If you don't mind, the doctor and I will walk there ourselves." Smiling, as ever, Manco withdrew. "Clever, aren't they?" said Dean. "With night coming on, they expect me to guide you astray and let you make a run for it. There are probably half a dozen giants within telescopic sight of here, watching us every minute. But we're going to that hut."

"What's your plan?"

"When I shake hands with you later, I'll slip the lenses back to you. I've painted eyes on them on one side; the other side is coated over with a heavy coating: black phenothalein. When you put them under your lids, you'll be temporarily blind, but the light won't be able to come through."

"I don't think—"

"Don't interrupt," Dean almost snapped. "I tell you it's all worked out; I know them. Listen. When the giant takes you in his hand to put you back in the hut, slip the lenses in. Then

turn around for a minute or so and face the opening. The Incas in the skull will then be shining that copper light in your eyes. Count twenty, then fall back and lie down. Count again, to one hundred, then take the lenses out.

"When you look out, you'll see the back of the giant's head very close to the hut. I'll take care of that in my own way. Now, at the back of the glass dome on the skull there is a long rod that moves in an arc. It's a safety device, the one the other giants threw in when that first giant went wild. If you move it down, the giant cannot be controlled from the skull. Reach out and pull the rod down. It may take the Incas a few minutes after that to open the skull, but they will. They won't know what's happened, because you'll never enter their minds . . ." Here Dean paused.

"Well?" I said.

"The rest is the key to the whole thing. It's going to be tough, and it's up to you."

"Go ahead."

Dean continued talking for the next few minutes, his face remaining entirely emotionless, except that he would smile now and again for no reason at all. I knew why; he was so sure we were being watched through telescopes as we walked. He finished just as we came to the first of the great trees that made the barrier.

"Dean," I said, "if this fails, it's the end. We can't kill Incas and expect to get away with it."

"We've got to get away with it—at least one of us," said Dean, passionately. "We're as good as dead anyway, unless you really want to make a bargain with them? This isn't a petty scheme or game. It's for keeps, for the highest stakes any man ever played for."

Just then he tapped me. Behind us

our erstwhile escort, Manco, had appeared, and behind him the gigantic bulk of a giant loomed, coming closer.

"This is it," Dean whispered. "You're going back up now." He held out his hand and I gripped it. The two lenses were in his palm. "Good luck," he said.

Then he turned and walked to Manco. I knew he would be talking to him for the next few minutes. Manco had already switched on the little light that Dean had told me about, the signal to keep giants from treading him into dust.

CHAPTER V

Escape from the Titans

THINGS moved swiftly after that. The giant came in and lifted me abruptly, swinging me up in a single motion to the floor of the hut. My hands had moved as swiftly to get the lenses in place over my eyes. I had no way of knowing what the outside of the lenses looked like, but they were perfect for blinding me.

I faced the door to the hut and stood at the threshold, slowly counting twenty, wondering whether the copper light was actually being played at me. Then, gradually, I sank to the floor and stretched out, simulating sleep.

Below, I knew, Dean was also counting. When I reached a hundred, I took the lenses out of my eyes. From the ground a thin shout rang out. I jumped up and took my post at the door, peering down into the thickening gloom. Manco's little light was moving about in extreme agitation. I looked for the giant—saw him very near, but beyond reach—and again a shout came from below.

The light was moving erratically, but coming closer to the bottom of the great pole that held up my hut. I knew

that Dean had already attacked Manco, and now he was forcing him closer. But would the giant come up from behind? Would he present the back of— There he was now, moving in! He was coming toward me. I ducked out of sight. When I peered again, the giant was very close; the men in the skull were trying to maneuver an approach which could guarantee that Manco would not be hurt if the giant lowered his fist.

The giant moved again. Evidently the struggle below was twisting in such a way that in an effort to follow the battle the giant's head had been turned almost directly with its back to me. Almost—and then it was four feet away. The rod stuck out darkly.

Holding on to the side of the hut with one hand, I leaned out over that drop of a hundred feet and gripped the lever. It had been made for a giant's hand, not mine. For a minute I thought I couldn't move it. Then the giant swung away, starting to move down, and when I refused to let go, the resulting momentary conflict swung the bar down in a single movement. It almost pulled me out of the hut, but frightened completely, I hung on and edged back into the hut.

The timing had been perfect! The giant was standing perfectly motionless, a balanced statue, one hand raised slightly higher than the other, feet close together, head barely bent over. There was no more noise from below, and I could see no movement within the dark skull. But all at once the outside of that great dome did quiver—and a small, triangular door, fitted so closely to the outline of the skull that it had been imperceptible, moved open. It was a leap of some three feet from there to the open doorway of my hut.

I gathered myself in the darkness, tense and waiting. The sleeper in the hut was to play his part. The first man

crouched and essayed the short leap. As his foot touched the threshold, I stuck out an arm and pushed him out into space. He spun down and away to the dark earth below without as much as a gasp. I ducked back.

In the ensuing silence, I heard a voice nearby calling. It was the second Inca, standing at the triangular door, trying to pierce the darkness. Again he called. There could be no answer. And there was no conversation in the dome-shaped glass skull, which meant that there was but one more Inca.

Now suddenly he jumped. Just as I sprang to the doorway to push him out, another shape jumped with him, colliding in mid-air, and both hurtled into the hut. Swiftly I wheeled and gripped the first as he lay off-balance. There had been two others after all! Now the first twisted away, and the other, crouching, came for me in a sudden surge. I met his stomach with my head—lifted him bodily, whirled about and pushed him out into space, his arms and legs flailing wildly, a cry breaking from him.

THE last of the three Incas was waiting for me, his hands weaving before him like a wrestler. I stepped close, my heart leaping. One of his hands encircled my neck. I came up close to his body and lifted a punch up from my feet. The Incas knew nothing of fighting with fists! The poor wretch had been waiting for me to grapple with him. Now he went down suddenly in a limp heap. I stood momentarily undecided whether to throw him out or let him lie there. What harm could he be unconscious?

Leaving him there, I judged the distance back to the triangular door in the stationary giant's skull. Dean would be waiting. Then I leaped, caught the edge of that polished glass door, hurtled

into the skull. One thing more. I reached out to the back of the skull, caught the lever again and moved it back up to where it had been when I first caught it.

Now the full ingenuity of Dean's plan came to flower. For, the giant having been arrested as he began to bend to the struggling humans below, was still set in his controls—and he now continued to finish the movement which had stopped several minutes before!

Clinging to whatever support I could grasp, I held on as the giant bent over. One of his hands reached out. Dean was waiting. He walked into the giant's palm. Then the great hand swung up again as the giant straightened. The giant brought the hand up directly before the glass skull. Then it stopped moving. Evidently the controls had been set only so far.

A small light gleamed in the giant's hand. Dean stood out in the contrast of that light, trying to work himself loose from the giant's loose grip. He clambered out over the fingers, then paused and leaped directly onto the skull. I followed the light as he slid across the skull to the back. In a moment he was through the door, beside me.

"Good work!" he muttered hoarsely. "Are you all right?"

He held up the light. His face was torn and bloody, stained with sweat and dirt. I mumbled something, but he had brushed past me, his eyes searching the machines within the skull. Then his fingers played lightly on a little balanced wheel.

I felt the giant quiver under me. Then he was moving. Again Dean's hands moved skilfully, this time over a board to one side where there were innumerable switches. The giant turned and his speed increased.

Dean and I had stolen a giant and

our escape had begun!

For several minutes neither of us spoke. The giant moved ahead surely, his great legs covering the ground with astonishing speed. Presently, Dean said, "We should be clear by dawn—if the bodies aren't discovered before then."

"Did you kill Manco?" I asked.

"I had to. Used my scalpel. But I waited until the last minute. If he'd gotten away to spread the alarm—"

"Dean," I said, "there's one of them alive back there. I couldn't kill the third one after I'd knocked him out with—"

"Great God!" Dean cried. "You left one of them alive?" I nodded in affirmation. "That's just liable to do it," he said quietly. "Our only hope now is that his cries won't be heard until dawn when he comes to."

But when I looked at Dean's face, I knew what he thought . . .

IT was toward dawn the pursuit came close enough for me to see it, miles away. There were three glass skulls shining in the sun.

Now, momentarily, even as I turned to give the alarm to Dean, I thought back over the events of the night before—the giant skirting the city, always on the edge, always under the immense trees. Then the swiftly silent dash to the center of the sleeping, ancient city. The giant had stopped and Dean flicked the switches rapidly. The giant's hands had moved among the silent machines there, turning the great wheels that looked like arc lamps, spinning dials, disconnecting wires in a dozen places. And always there was Dean's face, dark and intense, his eyes burning in his head.

How many weeks he had planned all this! How many times he had gone over each movement, and how terribly

hard he had studied, learning what everything meant. I had known the genius of Dr. Edward Dean before, but now I had the most profound evidence of it. There was nothing his fine intelligence could not grapple with successfully. "Pray that I've made no mistakes," he had said. "If it works, the results will be terrible enough to bring action immediately. But we need time—time—and a chance to get where we can explain what will happen the minute the sun hits that mirror in the morning."

Then on again, on and on through



the night, the giant running tirelessly. The edge of the gorge, and the painful maneuvering of the immense bulk up the jagged sides of the rock breaking through the mist. And on again, over the barren ground and through the great dead forest, across fields and valleys and streams. And always Dean quiet, watching the giant's responses. When the sun finally came up and most of the distance had been covered, he had looked out anxiously, and the disappointment had etched lines in his face. I had kept thinking of what would happen when we brought this

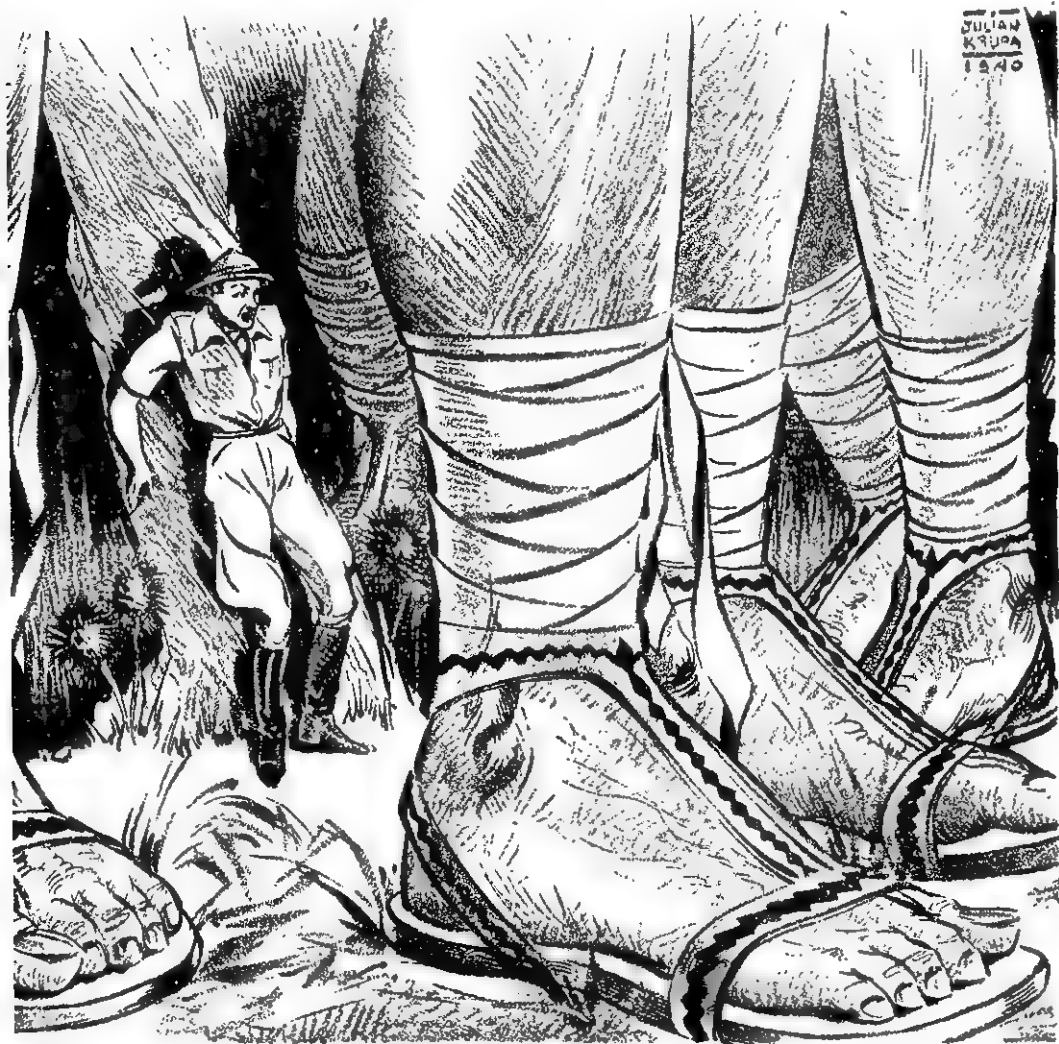
giant into one of the Peruvian villages . . .

But it was all useless. Behind us then were three great giants, and each step brought them closer. Dean couldn't manage our giant as well as the Incas. Moment after moment they were closer.

"Thompson," Dean clipped, "get ready to make a run for it. Remember everything I told you. Open that door. I'm going to have the giant set you down. Then you're on your own, and Godspeed."

"What about you?"

"Somebody's got to stay here and



Then I was on the ground, giants all around me.

head them off. You can't manage the giant. Get out and I'll fight them off till you're clear. Hide somewhere—now open that door!”

“But Dean, if—”

“*Open that door!*” Dean shouted, the veins in his neck knotting. “This isn't just you or me. *Get out!*”

I opened the door. Still on the run, the giant reached back and held his hand open for me. I climbed into his palm. He slowed down and the next moment I was on the ground in the jungle.

In the near distance I could hear the great feet thrashing through the foliage, upsetting everything in their way. With a sudden lurch, the giant whirled about and disappeared in the direction of the sounds.

Moments later I heard the first dull thunder of the meeting of the giants in the forest. The ground heaved under me and mighty trees swayed as if in a hurricane, but I ran on and on until I came to a tiny cave in the side of a hillock. There I hid until the frightful thrashing in the forest died away.

Thirst finally dragged me from my hiding place. In the quiet, the crackling sounds of my unpracticed feet were like rifle shots, but no one came. I was still an untold number of miles from the first of the villages near Cuzco, and I was without food or water or arms.

It was late at night when I stumbled into a settlement of Indians. I must have been a horrible sight. I could hardly stand from exhaustion; my clothes were rags. The villagers washed me, gave me a place to sleep. . . .

CHAPTER VI

The Hand of Death

THAT was the beginning of my return to Huayopata and, subsequently, Lima. On the evening of the

day after the Indians had cared for me, I was in Dr. Alfarez' private office. He had greeted me diffidently, his eyes far off somewhere. He thought I had been in Lima, trying to find Dean there. He felt, clearly, that he had been abandoned.

I had no patience for his personal feeling. “What happened this morning?” I asked, as soon as he stopped his complaining. Quietly, he told me. That morning four babies had died in childbirth—all the hospital had had—but three others had died who were more than a year old. And there were others dying all over Huayopata. There was nothing anyone could do. In his sorrow, Alfarez was retreating to a religious mysticism.

“God is punish us, *Scnor,*” he said softly. “He will wipe us out.”

“Nonsense! I've found Dean—and he knows what's happening here. Wait until I've phoned around a bit.”

The mention of Dean's name had shaken Alfarez a little, and he sat listening to me call. I called the surrounding towns, Echarate, Quilcanca, Urubamba, across the river to Santa Ana, across the Apurimac to San Miguel. In San Miguel the news was catastrophic.

In the other towns there had been an increase in deaths, but in San Miguel over three hundred infants of four years or less had died in the streets, in their cribs, in their gardens. But there also had been an appalling number of deaths—of old people. Almost as many elderly men and women had died with the coming of the dawn.

The little mountain town was half insane with grief and reasonless anger. The wires were humming through to Lima. I called Lima—the Consulate—on the phone and heard what they said: epidemic. Sending down a health commission. I hung up savagely.

Then I told Alfarez the whole story, leaving out nothing.

He kept shifting his seat toward the end, and he looked away from me. When I had finished, he stood by the window, smoking a cigarette. "Senor Thompson," he said, "how many days you were lost in the jungle when you look for Senor Dean?"

"Is that all you have to say?" I said, slowly, regarding him. "What's that got to do with what I'm telling you? Think, man, *think!* If they let go with that new mirror—"

"Excuse me, Senor Thompson. You say the *pequenos*, the babies, they die because Senor Dean do something?"

"No, I didn't say that at all. I said that Dean arranged the mirror during the night. He set it so that when the sun hit it, instead of the mirror working in the circle, drawing life off in a radial pattern—he fixed it so that it would aim somewhere in particular, so that one place, being hard hit, could get some attention. And I can explain it! Don't you see it?"

"Excuse me once again, Senor, if I say again how many days you were in the jungle?" He cleared his throat. "Bad things happen to you, *si?*"

I caught it then, like a blow that almost made me want to kill him. "Alfarez!" I shouted. "Are you trying to tell me that you think I'm crazy?"

"No, no, Senor!" he cried as I came toward him. "Of course. *Unos momentos*. I come back in a moment."

He edged to the door and slipped through. When I looked down the dingy white corridor, I saw him running. I don't know why I waited, but I did. Ten minutes later, a little, dark-skinned nurse opened the door. There were two swarthy country police with her, and all three came in. "The Doctor Alfarez, he say he no . . . no come back today. Too busy. Say please not

wait. *Gracias.*"

There was nothing else to do. The nurse stood back, and the policemen with her. I got up and left.

In my mind I could see Dean sitting in that cursed glass skull, waving good-bye to me as he turned the monster around to go back and battle for my chance to escape. To escape to what? To this? Dean; where was he now?

That afternoon I hired an old Ford and a frightened young boy to take me to San Miguel. We were hours getting there.

SAN MIGUEL was a madhouse.

There was no one to see. The American consular attaches had all gone to Lima to report. The Peruvian officials were scattered throughout the city. The health commission had begun to arrive, and already they had ordered a row of houses burned to the ground and signs saying DISEASE in three languages had been put up. Funeral corteges wound their sorrowful way through the dirty streets. Frightened children clinging to their parents filled the air with their incessant wailing, and over everything the heat came down . . . the sun . . . the malevolent sun, beating down, killing. . . .

I got into the car and drove to Lima alone. The boy had disappeared somewhere, leaving the car with me. I was in Lima by the afternoon of the next day.

There was nothing at all unusual there. Lima was the same. There were still the scattered Americans at the waterfront cafes, drinking their rum and calling out to the pretty girls as they went by. The flower sellers roamed everywhere, ducking the automobiles of ancient vintage that always appeared around an unlikely corner, horns blaring like ten thousand geese. Ladies in coaches, parasols up, drove by.

The American Consulate was a bit more active than when I had last seen it. Inside I told a clerk whom I wanted to see. He came back a quarter of an hour later and waved me in. Major Peregrine was sitting with both boots on his desk, a tall glass in his hand. He motioned to another on the table near me.

"Have a drink, Dr. Thompson. What do you want to see me about? I'm afraid I haven't much time. Riding appointment with a lady. Lovely lady."

"I didn't come here to drink," I said evenly. The tone of my voice was a mistake, perhaps, but I couldn't help it. "I've come to talk to you about Dr. Dean, my colleague, and what happened yesterday in San Miguel."

"Hmmm," said the Major, his feet sliding off. "So you're that Dr. Thompson. Didn't connect you with—" he broke off.

"With what?"

"As a matter of fact, Doctor, Dr. Alfarez of the Central Hospital of Huayopata called me yesterday."

"I see. You don't want to listen?"

"Not at all. I'm rather interested. Terribly interested, in fact. The Rockefeller Foundation's been inquiring about you, you know."

I took the drink then and swallowed it at a gulp. Then I told him the same story I had told Alfarez. His reactions were hidden for some moments. He tapped a pencil, then wrote a few lines. "Well, Doctor," he said, presently. "How would you account for the deaths of old people, together with children?"

"The machine sucks away life from the weakest first," I said. "If it were allowed to go on indefinitely, it would affect us all, but those relatively weakest would continue going all the time." The Major was silent. "You see," I added, "I don't know much about it. Only Dean knows it all—and God

knows what happened to him. We've got to go back there and save him if he's alive, and if he isn't, we've got to put an end to this."

"Just what do you propose, Dr. Thompson?"

"Send army planes there. Send an armed force. Bomb the place."

"On what evidence? On what you told me just now? Hold on a moment. Can't we be reasonable for a few moments, Doctor? Let us suppose that what you say is so. How would planes find a place hidden by—ah—mist? And how could we arrange to transport an armed force through wild country without first getting to the bottom of these—ah—giants you tell of?"

"How do you propose getting to the bottom?" I said.

"Well, to tell the truth, it would be no simple matter. But first, we'll write Washington the whole thing and see what they say. Meanwhile you can stay in Lima and sort of take things—ah—easy for a while."

"Major," I said. "Don't you believe me? Just tell me."

"OF course I believe you, Doctor. But you don't understand—"

"It's you who doesn't understand. While we're sitting here and talking, those Incas are working on that larger mirror. How much longer will they take, knowing that I got away? How much time is there? You want to write Washington. I tell you we must move immediately!"

"Impossible, my dear fellow. You just don't order bombers—and whose bombers, by the way—American or Peruvian? Order them to bomb some misty gorge because—"

I rose, interrupting him. "Because I'm telling you if you don't, your whole precious scheme of things will be wiped out!" I cried. "Because there'll be no

more you, or Lima, or any place! Because Ed Dean found all this, and he's somewhere in a Peruvian jungle dead, trying to tell you!"

The Major rose after me. "Really, Dr. Thompson, you force me to say things common politeness would otherwise avoid. I know you've been working under difficulties, and that this plague in San Miguel must affect you deeply. But you've got to take hold of yourself."

"In fewer words, you think I'm crazy?"

"Overworked, my dear Doctor. That, and Dr. Dean's disappearance, undoubtedly a fine man and a friend of yours. And the trek you took through the jungle did you no good. I tell you frankly that you're heading for a nervous breakdown, if you will pardon my presumption."

"You won't do anything?"

"Under the circumstances, no. Doctor, I give you my word that the epidemic in San Miguel will be beaten. It may take—"

Those were the last words I heard as I went through the door.

I must have seen a hundred people during the next day—or tried to see them. But the word had been passed around. They were all out, or busy, or they could give me but a moment. At the end of that day I was frightened more than I had ever been. The deaths in San Miguel had not recurred. The papers carried the news of how quick action by the Health Commission had wiped it out in a day. And nowhere was there anyone who would listen.

All the time there was one thing running through my mind. Dean . . . Dean . . . Dean. . . . The events in that unknown city in the heart of the mountains came back to me at night with terrifying clarity, and I lived through them all again. Somewhere a

race from the dead past had managed to survive and it was busy night and day, entombing its hatred in a machine to kill. When would the blow strike?

The next morning I wired home, telling my supervisor of the letter I was writing. They wired back immediately. *Dr. Aljarez already communicated. Order you return New York at once, otherwise immediate dismissal.*

I had reached the end.

But had I? Dean . . . Dean . . . I kept thinking, remembering, thinking of one little phrase of his. . . .

I needed *time*. Time to convince people. Time to show them what was happening, to beat into their stubborn heads that I was telling them something vital to their lives, to the lives of all of us. And to get time, I had to take it from the hidden race in the unknown city. Single-handed. It would have to be that way now. And the chance phrase of Dean's had given me the answer—a phrase characteristic of Dean's thorough, scientific mind, for he had found out everything there was to know about that strange land of the sun.

I went back to Cuzco, and spent the last of my money outfitting myself. I was afraid the police would question me about the boy Palo, but it never happened. This time I was taking no one with me. I knew it was my life now, but I was fighting for time.

And the most valuable part of my equipment was a little leathern bag filled with acorns.

Thus began the last chapter of my search for Dean and what came after I found him.

CHAPTER VII

The Golden Man

I WAS five days coming back to the gorge. Day followed day, and I went on relentlessly, my brain on fire. After

the second day there were no habitations, no sign of life. Sometimes I recognized a place I had seen before, a great stone, a fertile valley. The dead forest needed no identification. I had looked for the place where Dean had left me, with no success, and I pushed on. Often I was thirsty for hours before I found a stream, for there was no Palo to hear the far-off tinkle of mountain brooks now. Hunger fought with my race against time, for I begrudged every minute my body demanded aside from the task of going farther.

On the morning of the fifth day, shortly before noon, I came to the gorge. Afraid to venture out in the open, I retreated again, past the barren area, and hid there all day, waiting for the merciful darkness. The sun was a hot ball of vengeance, burning my skin, drying out the water in my canteen.

When it was dark, I approached the gorge and lowered myself into the great bowl. The descent was slow, and in the darkness I almost fell several times. At length, the wall ended and I stood on level ground. Some time later I reached the wall of the giant trees, and I followed them around.

It would be hopeless trying to find the giant mirror that night. Dean had never seen it, and I had no way of knowing where it might be. But there was one way. After a time I crept through the curtain of trees, found one of the radial streets. Stealthily, not knowing when death might come, I headed for the center of the city. In the dark quiet, my heart was like the beating of a jungle warning.

Once, ahead, I glimpsed a little light moving about. I remained stationary until it moved away. Later I heard the soft pat of great feet and looked up to see a giant swinging by on the path outside, oblivious of me.

At length the circular center of the

city lay before me. I crouched and ran across the paved square to the mirror. From my pack I took a small drill, set it in the earth, and drilled a hole through the paving, at an angle that reached under the mirror's cradle. Then I threw an acorn into the hole and covered it again.

I had done the same thing in four other places around the mirror, when I saw lights moving toward me—lights and huge shadows. To be caught now was to lose everything. This was only the beginning of my plan. I fled precipitately through the gloom and shouts rang out behind me.

The one thing that saved me was the fact that the giants had had to watch out for the Incas below them, who had started to chase me. In the extra minute I gained, I reached the fringe of the trees and began working my way down the far end of the valley.

Finally I came to the solitary pole which held up the hut in which I had been imprisoned. From my pack I took out a pair of claws, such as telephone linesmen use, fastened them around my legs. Then I began climbing up the hundred feet to the hut. At the top of the pole, I took out a hatchet, hacked away part of the floor and climbed through.

I needed another day—to find out whether the acorns would really work, to find the large mirror as a result. And that had meant that I would need a place of absolute safety for a whole day. What safer place could there have been than this hut?

Impatiently I waited for morning. The climb had used all my reserve energy, but the darkness had shut out the danger of my height. Still, I had not known fear—fear in the old sense of the word—since I had started for the city of the Incas. It wasn't bravery; it was just that I was more afraid for

others than for myself. . . .

I must have fallen asleep, for I woke to hear a great wailing sound. It was early morning. I jumped up and looked out of the hut, from a position against one of the walls. Naturally, the way it faced, I could see nothing. The wailing did not diminish. It hung in the air like a cry from the earth itself.

I began to drill a fairly large hole in the back wall of the hut. It was dangerous business, but I had to see what had happened.

Sharp cracks burst out somewhere, two, three in succession. After each one the keening rose in waves, filled with sorrow. I looked through the hole I had made, hoping to see the—

It was impossible to miss it. From the center of the city five great oaks rose, higher than anything else. Growing right at the heart of the mirror, they had probably grown a thousand feet in several minutes. Straight and proud they stood, their brilliant leaves like green shields in the sun, still growing bit by bit. Again and again the cracks rang out.

That was the mirror that the oaks had shattered to bits when they began to grow underneath it with the coming of the sun. The mirror had been completely destroyed. There was still the second and larger one.

I KNEW what would happen now.

Incas and giants were everywhere, searching, beating out the trees, the foliage, leaving not a corner unturned, hunting for me. They must have known it was I, and they must have known what I was figuring to do next. At least, that was the way I had planned it, for only if they suspected my intentions could they help them.

And they worked! Toward afternoon, with each unsuccessful hour of searching driving them closer to panic

—how many times I glimpsed Incas in the glass skulls with their faces set and pale—they began sending giants in one direction down the valley. That meant they were going to guard the second mirror, the larger one. I studied the general direction that the giants took. The next step was to outguess them again.

The Incas, having seen one night attack, would undoubtedly wait for another. They would never expect me to come up in broad daylight—but that, exactly, was what I had to do. There was no other way.

I took off my clothes and dressed in a short tunic which I had had made in Cuzco. Under it I carried the bag of acorns. I darkened my skin with a thin layer of a theatrical makeup cream. A band went around my head, fibre sandals on my feet. Then I strapped the linesmen's claws to my bare legs and prepared to climb down. The whole descent was going to be made in daylight!

I studied my surroundings for several minutes before I took the plunge. Luck was with me, more than I ever expected, but without luck I would have been dead long before. I made the descent fast enough to fill my hands with splinters, but I was safe. I hid the claws and headed for the trees, going where I had seen the giants go.

Presently I was in the city. People stood everywhere, gazing at the five oaks that rose from the center, their eyes filled with tears. Now and again a vast sigh rose from them as if they were one person. I moved slowly to avoid being conspicuous.

As I kept walking I fell more and more in line with small groups that were heading the same way I was. Evidently there was some sort of a pilgrimage to the new shrine, now that the old was destroyed. The Incas were Sun wor-

shippers, I knew, and what had happened was more than a matter of their weapon having been destroyed; it was their religion, their god.

The city dropped away and still we walked. Sometimes someone spoke to me in a strange language. I never answered. I kept my eyes on the ground and sighed, or called their "aie—ee" softly, and it worked. Then I saw the cradle of the new mirror.

It stood atop an immense structure made of solid granite. The building was a bowl with row on row of stairs, like seats, leading away from it. In the center lay the mirror, a sluggish, magnificent stream of gold. The mirrors of the Incas were evidently made of a liquid which solidified, and this one—I realized suddenly that I couldn't hope to smash this mirror the same way, because it wasn't working yet. The acorns would grow, but not fast enough to keep the giants from uprooting them. Only if they had grown under the very mirror as it was in operation would there be any guarantee.

There was one other way. I might not see it, but I would know that when the mirror was finally started, that it would be smashed. I could throw the acorns into the liquid mirror! When it solidified, the mirror would tear itself to pieces, as it took life from the sun.

With others, I went down to the mirror itself. In my hand I already held half a dozen acorns. As the others salaamed and bowed, on their knees before the mirror, so did I. Only I threw the acorns out of my open hand. They fell into the golden lake and disappeared from sight.

But the next moment I became aware of what was happening around me. All the people near me had backed away and were looking at me, pointing and talking. Had they seen me? Were they calling someone? From a nearby point

several Incas started on the run toward me—

Too late it occurred to me what I had done. I had dressed like Manco, who was a noble. But undoubtedly nobles didn't kneel in the open with the common people, for there were others around who had remained standing.

They had not seen me throw in the acorns, but I was doomed just the same. It was a matter of moments before they would have me, but I began running. If only I could make it back to the place where the hut was—outdistance them long enough to be able to climb back to safety. Foolish thought. They were breathing on my neck. Everyone in the place had taken up the cry.

I was cornered! There were others coming directly for me! I turned again, leaping up to the low wall that bordered the lake, and just then one of the Incas seized me from behind. I kicked out, felt my foot sink into his belly—then I was falling directly into the molten gold mirror! My balance had been precarious at best—the kick had destroyed it.

I remember the way I felt during that hundredth of an instant as I fell. I was surprised more than anything, and disappointed. I had come so far. Then I hit the mirror. It didn't splash. It was like falling on sponge rubber. The mirror just took me as if it were absorbing a blow. It was fairly cool and it clung to the skin. I lay there a moment, then I rose. My feet kept sinking in and I had to keep moving.

I looked up at the Incas. They were terror-stricken, silent, on their knees wherever they had chanced to be. Not a sound came from them, not a soul looked at me; it was as if I were someone from the dead.

The gold of the mirror covered me like another skin. What had it done? Was I the object of terror or of awe? I only knew that as I climbed out of the

cradle, the people covered their eyes and lay prone on the ground. I was either a god or a demon, something divine or accursed—but I was inviolate. No one would touch me. Few dared to look at me a second time. I remember how grateful I was then, how close to religious mysticism I was then myself. I wanted to thank Dean for saving me. . . .

I WILL never forget how I walked through that city of the Incas, in my golden skin. Everywhere I went the cries that rose up made me shudder. The people fell to the ground, weeping, moaning. Sometimes the whole city seemed to be crying as if it were one individual. Looking back I could see the five oaks standing proudly. I knew that someday soon there would be other oaks farther down the city. They would give me time to tell people. . . .

A week later I was back in Cuzco. I went from there directly to Lima. Unfortunately, word had come from the consular attache in Cuzco that I had been scaring natives out of their wits, acting as a sun god. That was because the gold would not come off my skin for days, and some of the natives were actually frightened.

The upshot was that when I came to Lima, the Major wouldn't see me, nor would anyone else. My job was gone and I had precious little money. I took a boat and came home to New York.

I've told my story here before, told

it so often people are sick of hearing it. I'm sick of telling it. No one believes me. I show them news clippings from newspapers; from *El Dia* of Huayopata, *Noticia* from San Miguel, columns from the *English and Spanish Journal of Lima*—they shrug. I show them little things I saved, like the lenses which Dean painted—they smile politely. I ask them what happened to Dr. Edward Dean—they shrug. The American Consulate is still officially hunting him.

But no one has done anything. No one has moved a little finger. How much do I ask? Only that some effort be made to verify my story. Let someone go back with me. I will pay all the expenses. But let this someone be an official, on an official mission, and let him be someone who will be believed, and at the risk of my life, I will prove what I say.

Listen to me. *This story has not ended.* Each day that passes, in a remote part of South America, in the bare mountains of Peru, a race of people forgotten by time, unknown to the world, is working. And unless that work is stopped, God alone knows what may happen. The mirror I fell into may be a ruin by now—but *they will build another. They are undoubtedly building another now.*

Ed Dean is dead. There is no one who can vouch for my story, but the story is not ended.

Something has to be done. Do you understand? *Something has to be done.*





He set the torch flame full on the robot head



ADAM LINK, ROBOT DETECTIVE

By EANDO BINDER

Adam Link, the strangest character ever to gain the status of a human being, finds a new field for his talents and dons human guise to become a detective.

I HAD just finished writing my last account. It was about Dr. Hillory, who had driven Eve, my created mind-mate, to commit crime. He had brought about her death, in a battle, at my own hands.*

There her great eight-foot body lay, silent as a shut-down machine. Grief overcame me, an emotion as real and deep as any you humans have. I pictured her as a human form lying there

—a young, lovely girl. But she was dead now.

It had begun to rain. Kneeling beside her, I removed my top skull-plate. The rain, pouring into my sensitive iridium-sponge brain, would short-circuit my life-current. I would join Eve in blessed non-existence.

Kay and Jack Hall, and Tom Link found me that way when they arrived a moment later. Police were with them. "Adam! Adam Link!" Jack yelled.

* AMAZING STORIES, February, 1940.

"Hillory is dead! We saw him fall down the cliff. Your troubles are over. Adam, what are you doing—"

But I heard no more. A hiss sounded from within me, as the water touched a live wire. Smoke curled up from my exposed metal brain.

Adam and Eve, the first of intelligent robot life, were leaving the world not meant for them. . . .

AWARENESS came to me instantaneously, as it always does when I am "revived." I looked around. I was inside Dr. Hillory's laboratory, out of the rain. Jack and Tom stood before me, smiling in relief. Kay knelt beside Eve's form, lying supine on the floor. The police had helped drag us in. They stood watching, somewhat at a loss over this resuscitation of robots.

I started. I heard a moan. A raspy, metallic sound. It came from Eve's microphonic throat!

"You poor fool!" Jack exploded at me. "Your final blow stunned, not killed, her. Haven't you heard of someone being knocked cold? She's coming to. You blithering idiot, taking her for dead—"

It was true. I crawled beside Eve. Her eyelids clicked open. I could almost feel the terror that flicked through her. Her last impression had been my crashing steel fists at her with all my frightful machine power. She took in the situation at a glance, in that quick way we robots have.

"Adam—" one of her hands reached for mine. It was all she could say in her joy. I couldn't say anything.

"As for you," Jack continued, "we jerked off a battery-cable before the short-circuit burned out your brain, dragged you in, and after drying, re-connected you. Just about in time, you crazy, senseless tin boob—"

Kay stopped his vehement "bawling

out," which I deserved. I am supposed to be a cold, clear intelligence. Yet like a hysterical neurotic, I had very nearly clipped off our two robot lives. Hand in hand, Jack and Kay looked down at us, Eve and me, also with our hands together. They understood why I had been driven frantic.

Jack was now grinning. "With Hillory out of the way, you can start life all over, Adam and Eve Link—"

"Just a minute!"

The police captain stepped forward. "I have a warrant for the arrest of Adam Link, for the robbery of Midcity Bank and the murder of Joshua Kalb!"

This new blow was like lightning. Trouble had not ceased to dog our footsteps for so long that I had forgotten what happiness had been.

Jack whirled. "But Dr. Hillory caused that. You see, Hillory used remote radio control and had Adam and Eve Link in his power. He is the true robber and murderer—"

The police captain was terse. "Sorry, I'm following orders. Evidence shows that a robot did both crimes. Adam Link must come with me."

"But it wasn't Adam Link," Tom spoke up suddenly. "It was Eve Link!"

"No, it was I!" I snapped quickly. I didn't want Eve to go through all the turmoil of a court trial—and face possible sentence, if worst came to worst. I sent a searching, almost angry glance at Tom Link.

"Eve, I say," Tom insisted.

"I'll have to take them both along," said the police officer. He and his men were smiling. The whole thing, I could see, struck them as queerly humorous. Particularly one robot trying to shield another, like humans might. Only Jack and Kay and Tom, my friends, understood.

But I noticed that behind their smiles, the police were tense, ready to grab for

their pistols. One of us, myself or Eve, was a murderer. More than that, we were fearsome metal monsters, eight feet tall. I could see that inevitable thought coursing through their minds—*Frankenstein!*

No use to resist, of course. It would have been easy — Eve and I rushing through them and laughing at their bullets. Yes, but then what? Hounded, persecuted, through the woods and hills. State militia called as a last resort, surrounding us with grenades and heavy guns, with orders to destroy the two loose monsters. No, that was the last thing in the world I would do. I had patterned my life in the human way. We would face the agencies of law, though I hated the thought of again going through its legal claptrap.

"Come, Eve," I said quietly. "We must deal with humans on their own footing."

We were taken down the mountain road to the city in one of the two squad cars. The engine groaned with our combined half-ton of weight. Jack, Kay and Tom followed in their car.

BEFORE the indictment a few hours later, Tom managed to whisper to me.

"Don't shield Eve, Adam. Let her go through the trial. She will then acquire human status, as you did in yours. I'm certain I can save her from the charges—but only with you as witness of Hillory's evil control. You are a human, in court records. Therefore your testimony will be official!"

I nodded. Tom's clear legal reasoning had foreseen all that. My thoughts leaped ahead. Eve exonerated, legally a human. Then both of us would apply for citizenship, as my creator, Dr. Link, had from the first day of my "birth" visioned. And even—my heart sang—a church wedding for Eve and me! Then

we would be the legal equals of full-fledged humans, in the eyes of the world.

The words of the official reading the indictment crashed into my hopeful thoughts.

"Eve Link is hereby accused of the robbery of Midcity Bank, and of the murders of Joshua Kalb, John Deering, Tony Pucelli, and Hans Unger, all of this city!"

Tom started. "*What?*" he demanded. "Why is Eve Link being accused of three other murders?"

The official looked up with a hard cynicism.

"Investigation reports came in, just before we drew up the final indictment. The next night, after Kalb's murder, those other three were murdered—Deering, Pucelli and Unger. In each case, clues pointed to a robot. Marks on their bodies could only have been done by a metal instrument. Even bits of metal filing were found!"

Jack groaned, at my side.

"I get it! You remember how the papers played up the robot angle immediately after Kalb's death. Everybody read it the next morning. Some clever criminal organization in the city, seeing that, promptly carried out three of *their* gang murders the next night. Using metal clubs, and leaving metal filings, it points to Eve as the culprit, continuing her 'brutal, berserk murder of innocent humans'—as the papers played up Kalb's death!"

He groaned again. "How clever—how damnably clever!"

The official shrugged. "You'll have to prove your claims in court. The trial will be held in a month."

Tom Link turned a pale face to me. He didn't have to say it.

Eve was doomed!

Tom might prove Hillory's actual guilt in the case of Kalb. But three

other lives had been taken wantonly, cold-bloodedly, by the Frankenstein monster named Eve Link!

Frankenstein! Frankenstein! Already I could hear the word shrieking through the city, in every newspaper and from every radio speaker. Eve had the noose around her neck.

Jack put a hand on my arm. I think I was trembling. When my thoughts are disorganized, my internal machinery is also.

"We'll put detectives on the job," Jack said. "We have a month's time—" But he exchanged a hopeless glance with Tom.

Detectives. A month's time. A clever criminal ring that had covered up its trail cunningly. A whole city aroused against the robots parading as humans, taking life in secret. It added up to zero—for Eve. My thoughts crashed to that conclusion in seconds.

I warned Tom and Jack to say no more. I turned to Eve.

"Go to your cell. They will lock you in. On no account must you try to leave." I paused. "We must accept what comes. The case is hopeless. Do you understand, dear?"

Eve was shocked. I could detect that in the way her internal hum had missed a moment, exactly as a human heart may skip. She had been waiting for one word of hope from me. I gave her none. She was led away in a dead silence.

"I'll visit her every day," Kay said sympathetically. "Poor child, she'll feel so frightened and alone." She glanced at me almost contemptuously for my brutal dismissal.

CHAPTER II

My Disguise

"**D**RIVE to my mountain cabin-laboratory," I directed, when we

were outside.

It was not till we were there that I spoke again.

"Out with it," Jack demanded shrewdly. "Something's seething in that brain of yours."

"I thought you were a man, Adam Link!" Kay said furiously. "A man who would fight for one he loves. You could at least have said one word of encouragement. Why did you tell poor Eve that the case was hopeless?"

I winced a little under her scorn. But I spoke firmly. "For the benefit of the officials. And the reporters waiting for the least little rumor or report to play up. And most important, for the benefit, eventually, of the criminal ring dumping their murders in Eve's lap. They'll sit back now, confident that we won't try a thing. They won't know that a detective is on the case. A detective by the name of—Adam Link!"

They gasped.

"*You!*" Jack snapped.

"Yes, why not? Without meaning to boast, I think quicker than any human. I have super-keen ears and eyes. I have strength and quickness and powers no human detective has. I can do more in a month than ten men."

Jack shook his head sadly. "You've forgotten one thing, Adam. You've naturally come to think of yourself as human. But the whole meaning of the word detective is spying in secret. How can you—with your metal body?"

I stepped to my workbench and brought back a bowl of sticky, rubbery plastic. "I was working on this before Hillory upset my plans. I was toying with the idea of—well, look—"

I smeared some of the plastic over my frontal-plate, with a spatula. It was opaque, hiding the metal. Its color was that of human flesh.

"My disguise," I said. "Human disguise."

I turned to the thought-helmet, the one with which Hillory had diabolically controlled Eve. Now there would be at least one benefit from the hell we had been through. The thought-helmets were a godsend in this hour of need.

Switching on the power, I sent a radio-beam searching for Eve's mind. My electrical thoughts modulated the beam, in a process akin to telepathy.

"Eve!" I called. "Can you hear me?"

"Adam!" came back almost instantly over the conducting beam. "I've been so afraid—"

"Don't be, darling," I returned. "And forgive me for leaving you so coldly. It was necessary. I'm going to save you, Eve. I'm going to save you!"

But it was not till two precious weeks later that I began.

I had had to work day and night, perfecting the plastic, giving it the rubbery consistency of human flesh. And also making it adhere firmly to metal. I think a human chemist would not have solved the problem in a year. But I was driven by a demon. Every tick of my internal-electrical distributor counted off the hours with the noose tightening around Eve's neck.

I USED my former, smaller body, before adopting the giant one in my battle against Eve's giant one. It stood five feet ten—human height. Covered with plastic, my torso was rather thick, giving me the appearance of a burly man. The legs and arms were easy, though it was a trick to pat the plastic into folds at the joints. I cut my flat feet-plates down, to the proportions of a human foot. Covered with clothes, the imperfections of my pseudo-human body weren't glaring. The important thing was that my hard metal was covered with a softer medium.

Molding my face and hands took the most delicate labor. They would be ex-

posed to constant sight. Jack and Kay were my faithful assistants. Tom was down in the city, delving into the case.

My hands came out as big hams, worthy of a prize-fighter. The fingers were rather stiff, because of the metal "bone" beneath. Jack carefully set human hair into the plastic, over the knuckles, in keeping with my general appearance as a big, brawny man. He molded my facial features with a master's touch—outjutting chin, heavy straight lips, low forehead. He couldn't resist giving me a slight pug nose and a cauliflower ear. Over my shiny skull he glued a wig of matty black hair. And a rather heavy mustache on my upper lip, to help conceal the fact that it didn't move when I talked.

The eyes were a problem. I made them myself, two little hemispheres of clear thin glass. My vision was somewhat distorted, and it was a blue world after Jack applied blue-stain for irises.

Kay did her part, rougeing the cheeks and lips cleverly, to take away the dead-flesh texture. Little touches of cosmetics around the eyes and nose blended the features properly.

"There!" Jack grunted finally, with his irrepressible sense of humor. "Didn't know I was a master sculptor down underneath!"

They surveyed me critically, from top to toe. I wore a dark tweed suit and a cap pulled low. Suddenly, though they tried to resist, they burst out laughing. I could not blame them when I looked in a full-length mirror.

In the glare of electric light, I was perhaps the strangest looking being imaginable. A big, hulking-shouldered man with a dead "pan" and clumsy arms and legs. Jack stopped laughing and substituted a shaded lamplight for the overhead glare. And there, in the half-gloom, with imperfections hidden, I seemed suddenly to come to life.

"You'll do," Jack nodded soberly. "You can work only at night, though. And keep out of bright lights. Outside of a certain stiffness in your carriage—which might come from being muscle-bound like any has-been fighter—you're Pete Larch, the pug."

They gave me lessons in walking and swinging my arms naturally. I learned to slouch a little, and take short strides instead of my long, ponderous ones. A rough job, all in all, but we only had two weeks. I would pass for a human to all but the most searching eyes in bright light.

"One thing, though," Jack said worriedly. "That damned jingling noise you make inside." He had the answer to that quickly. He drew out a large watch that made a loud ticking. "Put it in your vest pocket. Kay never liked it anyway. At strategic moments, take it out so they think it's just that turnip clattering away, and not your gear-and-cog innards. Well, Adam old boy—go out and get your man!"

He had tried to lighten the moment I left with a flippant tone. But beneath it we were solemn. I had a big job ahead of me, with no inkling of how it would come out.

Two weeks were left. Two weeks while Eve lay patiently in a stone cell, with the thoughts of a city of humans rising in a tide against her. The papers had been editorializing in fuming denunciations, demanding that once and for all the robot "menace" be wiped out. The jury at the trial wouldn't give Eve a ghost of a chance.

I contacted Eve as I drove toward the city on my errand. The radio-beam control was in my chest-space, connected to my battery for power, with button controls wired into my trouser belt.

"Eve! I'm starting out now to find the murderers who hope to see you

atone for their crimes. Be patient, loved one!"

"I will, Adam. I trust you. I know you'll save me."

I PARKED the car in a downtown garage, then strode toward the criminal quarter of town. I chose the least frequented streets, where lamplights were dim. Whenever I approached another pedestrian, I watched him narrowly. Most humans unconsciously glance at someone passing. Their glances at me showed nothing of surprise or suspicion. Only at times, a slight repugnance. A wholly natural reaction, in that I was no debonair fashion-plate, but a seedy, degenerate looking individual.

I was satisfied, as I went along. My human disguise, despite first misgivings, was adequate.

In the criminal quarter, I made my way toward one of the "dives" that were distributed in the neighborhood, frequented by hoodlums, gunmen and all specimens of the lower element. Jack had named three of the places as the most likely hangout for members of the ring we were after. The one victim, Pucelli, pinned the crimes on a certain organization that Jack knew about from his newspaper work.

"Probably the biggest, most powerful gang in the city," Jack had said. "Racketeers, strong-arm men, kidnapers—they've had their hand in everything vicious. The rumor is that the brains, or Boss, of the outfit is a well-protected, solid citizen, known only to his organization. You can't get at him. Just try to find out who did the actual killings, at his orders. Tom will do the rest."

I paused, outside the dive. Adam Link, detective, took a breath—figuratively, at least. Pete Larch walked in.

CHAPTER III

My First Clue

THE dive was noisy, smoke-filled, dim. Thankful for that, I slumped in a chair in a dark corner. A bartender came.

"Whiskey," I ordered, in a low gruff voice, striving to hide its mechanical inflection.

"Chaser?"

"Soda."

Jack had posted me on all these trivial, yet important details. The drink came and I tossed down the coins. The bartender gave me a searching glance. For a moment I was appalled. Did he suspect? Had I done something wrong, in my guise as a human? Then I realized that in a place such as this, every human was given an inspection. A once-over. He shrugged slightly, and from that I gathered that he had put me down as a common drifter.

To anyone observing me, I must have given the impression of a morose chap with nothing to do, here for a few drinks, unconcerned with anyone else. I was quite the contrary. My photo-electric eyes—my real vision behind the glass camouflage—took in every individual in the place. My sensitive tympanums, behind their plastic dummies, were listening to every conversation in the room. To every word whispered between men seated in a far corner, for instance. I have the capacity to select sounds, from behind a background of din.

Sixty feet away with a tinny piano banging in between, I heard one man mutter to another: "So I says to him, I says, look here—"

Senseless, brainless mouthings. I began to wonder, as I listened all over the room, what life meant to these creatures. It was all so pitifully meaningless. Dr.

Link, my creator, did not tell me that so much of humanity drinks the dregs of existence. That so many of his fellow beings were further removed from him, in mentality, than I could ever be.

I felt at that moment that not one person in the place was as much a human being as I was. It made me feel good. And it made me feel sad. Poor people, they had less chance than I of ever being worthy of the name *man*. They too, had a precarious place in society.

It happened so quickly, I had no chance to think.

A soft form plumped into my lap. I looked around at one of the painted women whose shrill voices and hard laughter filled the room.

"All alone, big boy?" she said in false sweetness. "Come on, pep up. Have a little fun! You look like a funeral on two feet." My plastic face, of course, could not smile.

Her arm slipped about my shoulders, where the plastic-padding was thin. "Mm, hard as nails, aren't you? And you feel cold. You need some warming up—"

Her face came closer, lips puckered. I'm afraid my reaction was rather abrupt. She must not press her lips against my artificial ones and perhaps get a real shock. I pushed her off, almost violently.

"Say, you—" Fury blazed from her eyes, as she nearly fell to the floor. "I'll have you know I'm a lady!"

"Sorry," I muttered, aware she must be pacified. "I don't feel well. Here, have my drink."

I had been contemplating tossing it on the floor anyway. She downed it all in a gulp, smiled, and edged back toward me.

"Get going!" I muttered, remembering a man had used that expression before to one of the girls he apparently

didn't like.

"Okay, okay—" And she moved off, curling her lip.

The whole episode amused me, as I think it must you too.

I LEFT the place hours later. I had no slightest clue of any sort. The other two places Jack had mentioned were similar. I haunted them night after night, desperately. In the daytime, I stayed at Jack's apartment, not willing to risk my disguise against daylight. I began to despair. A precious week had slipped by.

"Buck up," Jack kept saying. "You'll get a lead. And you knew how long a chance this was, with nothing to go by."

"How is Eve?" I asked Kay so often I tried her patience. Kay visited her faithfully, every day. I couldn't myself without risking exposure of my secret sleuthing.

I contacted Eve with radio-telepathy every day, too, but only for a few seconds. The current used up could not be spared too freely. I had a two-week battery within me, and could not replace it except by scraping away my chest-plastic. That would waste time.

Jack and Kay touched me up at times, keeping up my near-human disguise. They had plastic ready, at their place, in case some of mine came off.

One short week left!

And then one night my brain leaped.

I was in one of the pleasure-dives, playing poker with four men. I played for the reason that sitting night after night alone pointed a conspicuous finger at me. Also, I must confess, I had enjoyed the game when playing with Jack and his friends at one time. Periodically I pulled out my loudly-ticking watch, so that they would mistake its noise for my internal sounds. I watched them closely. They never suspected.

The man across eyed my perfect "poker" face uncertainly, shuffling his hand. "You bluffing again?" he suggested. My reaction was a complete blank. "Nope," he finally decided. "Ain't worth five bucks to me. You got my straight beat or you wouldn't have raised me twice." He threw down his cards.

I quietly slipped my king-ten-seven-four-deuce into the deck and raked in the pot. More chips were stacked before me than the other four had together.

"You play a mean game, Pete. You sit there like a mummy. You don't even move your eyes. You really concentrate!"

I laughed within myself. If they had only known that little more than one-tenth of my brain was on this trivial game. All the while my full mental powers were concentrated on scanning the room and tuning in methodically from conversation to conversation. I focused on two men hunched over a table, heads together, across the room.

"The orders from the Boss is to lay low, see?" one man murmured. "After that metal dame gets the works, we can go to town again."

Senseless talk, like all the rest.

"Cut?" The game again, demanding one-tenth of my attention.

I cut with my big hand. I was about to eavesdrop elsewhere, in the meantime, when it leaped out at me—metal dame! I had caught on to some of the twisted slang in use, in the past week.

Metal dame meant Eve!

It was my first lead.

I DIDN'T move. I didn't give the slightest sign that I was straining to hear more. The two men were fifty feet away. Between was a confused babble and clinking of glasses. It was all my sharp, selective tympanums could do to

separate their whispers from the extraneous noise.

"Who's on the job?" asked the other man.

"You in, Pete?" — the card game again—"How many cards?"

I tossed in a chip and threw one card away. I had four sevens.

Names were mentioned, in a guarded whisper fifty feet away that no human ear could have heard from five feet. "They're meetin' at the warehouse, near Larkin's, tomorrow night. But we don't go, the Boss says. We—"

"Two to stay in, Pete. You raise two? Raise you two! You're bluffing this time. You drew one to a full-house, but I've got aces up. Two to you!"

"—lay low. Let the metal dame burn for you and me, first."

"Okay. I'm going; get some shut-eye."

"Me, too."

"What you got, Pete? Fours! Damn it, you ain't human!"

Instead of gathering in the pot, I shoved all my winnings away. "Divide it up, boys," I said, rising. My eye was on the two men weaving their way to the door. The two murderers in whose place Eve was to be sentenced to the electric chair.

I moved too fast, however, in my eagerness. I bumped against a heavy-set man just passing our table. He staggered back, then straightened, glaring at me.

"Watch who you're bumping, you clumsy bum!" he roared. "I'll teach you—"

"It's Slug O'Leary!" gasped a voice. "He'll kill the poor guy—"

 Meaning me.

He came at me with swinging arms, obviously short-tempered. He was a giant of a man, solidly built, with arms thick as posts. His fist came straight for my head. He met nothing. I had

dodged, with a swiftness given me by reflexes triggered with speedy electrons. Recovering his balance, bellowing in rage, he swung three more times in split-seconds. Unfulfilled blows that would have knocked any human out. Or would have broken his arm if they had touched me. My head weaved aside, easily avoiding the haymakers.

The semi-circle of watchers who had quickly bunched around us stared in disbelief. They had never seen anyone dodge that fast. Also they grinned. Humiliated, Slug O'Leary came at me with new tactics, extending his great arms for a bear-hug. He tugged, expecting to lift me off the floor and fling me down bodily. I wonder what he thought as my 300 pounds remained glued to the floor.

He tugged again, mightily, his face red with strain and fury. I felt a little of my plastic, in back, give way. To break his hold before further damage, I hugged him in turn. I squeezed slightly. His breath went out in a gust. One of his ribs cracked a little. I let loose then and he staggered back, amazed.

AMAZED, but not beaten. I was forced to admire his courage as he caught his breath, growled like a wounded bear, and plunged at me again. I could not risk another encounter. He might tear away part of my disguise. I had to get rid of him and follow my quarry.

I would have to hit him. . . .

Perhaps you who read wonder why I delayed so long in this decision. Why I allowed this senseless physical battle to keep me from immediately following the two men so important to my mission. Let me explain. I had never, in my two years of life, struck a person before. Had never used my machine-given strength against fragile humans. For one thing it was dangerous—I

didn't know my own strength. But most important, it had been my steadfast resolve never to use brute power to gain my ends, and thus label the intelligent robot as a monster to be feared.

But I had to now, for the sake of Eve.

My arm came out. I pulled the punch as much as I could, knowing too well of the levered power behind it. It landed squarely on his chin, with a sharp crack. Slug O'Leary's knees bent and he slumped to the floor without a sound.

"Knocked cold!" said an awed voice from the crowd. "First time I saw Slug get it!"

I stared down at the fallen man. Within me for a moment I was—well, sick. I had struck a human being! I wonder if you humans consider that as utterly repulsive and degrading as I did, using the methods of the beast. But I know enough of life to know that you humans have not yet eliminated that in your so-called "civilization." I do not mean to moralize. Certain things are self-evident.

The ring of watchers cheered. Hero of the moment, they crowded around me, slapping my back. Stinging their hands, undoubtedly, and marveling at my hard "muscle." I groaned within. Almost, I bellowed for them to get out of my way. I wanted nothing of their stupid acclaim. I wanted only to get out, after the two men. They were gone already. But I couldn't get through that press of crowd without using rough methods. My plastic wouldn't stand rough handling. And another display of my strength would brand me for what I was.

Something warned me not to risk it. Adam Link, detective, must not yet be exposed. I allowed my card-playing friends to hustle me to the bar, and a drink was placed before me.

"I really have to go—" I mumbled.

"Aw, you've got time for one drink at least," one insisted. "Pete, old boy, you're a grand guy. Look, he ain't even breathing heavy! Grand guy—"

I basked in that for a moment. Somehow, it felt good to be treated like a human, even by these rough-cut creatures. Perhaps my first judgment of their kind was too harsh.

"Come on, drink up!" Glasses were raised—to me.

It was the only way. I tossed the liquid between my plastic lips. I felt it course past my metal larynx. Stupidly, I had not foreseen such a circumstance. And now I felt the liquid begin to drip down upon exposed wires.

Hastily I mumbled excuses and turned away. By their conventions I was now free to go. Slug O'Leary came toward me near the door. They had dashed water in his face, bringing him around, apparently none the worse for the blow. I tensed. Would I never get out?

He stuck out his hand, grinning. "Pal, you're the first man has licked me in five years. Shake!"

CHAPTER IV

I Am "Taken for a Ride"

OUTSIDE the place at last, I felt a peculiar glow within me. But not only from that gesture. The drink had now trickled down on wires, creating a short. As I stepped down the street, I was weaving. It is amusing, even to me, to think that one drink has far more "kick" for me than for any human. The short had upset my electrical spirit-level system that keeps my balance.

"Drunk as a Lord!" commented a man to his companion as they passed.

It was a new sensation to me, vaguely pleasureable. But sharp warning clicked in my brain. I hurried.

I went down alleys wherever I could, breaking into a staggering run. I reached Jack's apartment and collapsed on his doorstep.

"Quick!" I was barely able to mutter. "Disconnect me for an hour—"

When they reconnected me, the liquid had evaporated and I was myself. I told my story.

"Those were the two 'trigger' men, then," Jack said. "Though they varied it with metal clubs that night, to involve Eve. You didn't get their names? You'll have to go back and wait for them to show up again."

I pondered. "If I do, and trail them, will it lead to the man who gave them orders?" I asked.

"The Big Boss?" Jack shook his head. "No. He told them to lay low—which means to keep away from him. The best we can do is identify the two killers and let Tom fight it out in court."

"I'll prove in court," said Tom, who was there, "that the metal filings weren't from Eve's body. Then I'll indict the two killers."

"But in the meantime," I said slowly, "the man really responsible—the Big Boss—goes free?"

Jack pounded his fist into his other palm. "I just wish we could get him! He's the mainspring of the most vicious, powerful crime ring in this city. But it's out of the question—"

"Is it?" My thoughts were clashing, grinding. The actual killers caught; Eve freed, perhaps—but the brain who had played with them all as pawns would be untouched, unpunished.

"Where is that warehouse, near Larkin's?" I said. "I'm going there tomorrow night."

"Don't be a fool," Jack retorted. "Waste of precious time. No one can uncover that ring in one short week."

"Not even Adam Link, detective?" I said.

THE next night, following Jack's instructions, I was heading for the warehouse district, near the criminal quarter.

But before I got there, in a fairly respectable neighborhood, something happened.

I was passing a dark gangway in a deserted street.

"Stick up your hands!" came the gruff command.

I turned to face a threatening figure, cap pulled low. He held a gun against my side. I had heard of them, of course—petty hold-up men, lurking for the pocketbooks of unwary citizens. Sometimes I cannot understand these things. Why do you humans prey on one another, in this and so many other phases of life?

"Let's have your money," he went on. "And that watch I hear ticking." He seemed suddenly to become aware of how powerfully built I was. "No rough stuff," he warned. "Or I'll plug you!"

Electrons move at nearly the speed of light. Electronic impulses surged within my iridium-sponge brain—commanding my arm to move. It moved with the smooth swiftness of finely-meshed gears.

I don't think the gunman was even aware of it till it was over. I snatched the gun out of his hand. Then I held it up in one hand—and squeezed. The gun crumpled and I flung the broken pieces away. The gunman watched with a paralyzed fascination. I almost felt sorry for him, picking me of all possible victims.

With a half-shriek, he tried to run off. I grasped his arms and placed my two feet over his toes, pinning him against my chest. I felt his toes squirm in agony. He beat his fists against my frontal-plates, where the plastic-padding was thin, till his skin cracked and blood spurted.

Then I let him go. He stumbled off, moaning. I had not harmed him permanently. I only wanted to give him a lesson. Some day a police force of robots like myself may patrol the streets, meeting criminal brutality with its own coin. Some day—when I have proved that the intelligent robot is less of a monster than men like that.

I went on to my destination. There was a dive called "Larkin's Pleasure Palace". Back of it, as Jack had said loomed a huge dark warehouse. In there, four men were meeting, part of the Big Boss's crime ring. I could not find a way in from the street level. I saw the first level of a fire-escape, ladder pulled up. Flexing my legs, I leaped straight up ten feet, catching a metal bar and swinging myself onto the first landing. I made no noise. I weigh 300 pounds, but I have more timing and absolute control over motion than any circus acrobat. I say these things without false modesty. They are facts.

I clambered up the fire escape quietly, and found an open skylight on the roof. From there I took a running broad-jump of some thirty feet to a broad metal beam running across the warehouse's interior. Here I perched silently, listening.

I heard the low murmur of voices a hundred feet away, from behind boxes stacked to the roof. I dropped to the floor into a pile of excelsior. It deadened my landing to a low thud. I crouched, listening, but they hadn't heard. I made my way—tiptoed, you might say—to a position behind the rampart of boxes. From beyond I could distinguish their words clearly.

They seemed to be plotting some nefarious business, but in language whose criminal idiom escaped me. It was something about a kidnaping. I was not concerned with that. Only with something relating to the Big Boss—or Eve.

I began to wonder if my quest would be useless.

Then I tensed.

"O KAY, that's settled," one man's voice said. He laughed. "The Boss says that way we'll pin it on the robot again—on the other one, Adam Link. What a couple of tin monkeys he's making out of them! Joe and Lefty are laying low till the metal skirt takes the rap for them. Boy, the Boss sure has brains!"

"Yeah," agreed another. "And pretty soon he'll be on the City Tax Council, cutting us in on easy graft and big money. That'll be sweet—Councillor Harvey Brigg—"

"Shut your trap!" hissed the first man. "Hasn't the Boss warned us never to mention his name?"

"Aw, who's going to hear—"

Again he was interrupted. "Which one of you guys is sportin' that loud ticker?"

There was silence for a moment.

I SHOULD have been warned. But I hardly heard. Only one thing drummed in my mind—Harvey Brigg! Harvey Brigg! I knew his name. The name of the man who had plotted three murders in the name of my innocent Eve.

Suddenly two ugly automatics were pointing at me, from both sides at once. The men had come around the boxes. I could have leaped away, easily, even then. But again something warned me not to risk exposure of my identity. Better to act the part of a human, caught like a rat in a trap.

They prodded me around the boxes to where they had sat. A flickering candle lighted the scene. They peered at me in its dim rays. The illusion of my human disguise held, fortunately.

"A dick, eh?" barked the leader of

the four. "The Boss warned us to watch for dicks working for Adam Link. How much did you hear?"

I maintained a silence.

"We'll make you talk, smart guy! Barney, find some rope."

They tied me flat against a box, standing upright. Then, after ripping my chest free of the coat and shirt, they held burning matches to my "flesh." I acted the part of a man in torment, with what histrionic ability I could summon. I squirmed against my bonds and made low moans. But I held my squirmings in check, lest the cords break.

I only hoped they wouldn't penetrate my disguise. Luckily, the stench of the plastic under the flame was not much different from seared human flesh. I gathered that from their rather sickened expressions. I have no sense of smell.

"Guess he won't talk!" said one of the men. They had burned welts all over my plastic chest. They could not hide a certain grudging admiration, thinking me a human with remarkable fortitude.

One of the men fidgeted. "Maybe he heard everything — even the Boss's name!"

They looked at each other. The light that gleamed in their eyes made even me shudder. It is the look of human beings about to kill another.

"Okay, wise guy!" snapped the leader. "You won't talk dead any more than alive. Let him have it, boys!"

Their guns spoke in chorus. The heavy slugs thudded into my chest plastic, in a barrage. Carrying my part to the last, I slumped back against the box, head lolling. One of the men grabbed my wrist and felt for the pulse.

"No heart-beat," he announced. "Went out like a light."

Calmly the leader then flipped the lighted candle to the floor, kicking a pile of excelsior toward it.

"They won't even find the body!" he

exulted. "Come on, boys—"

They left my "dead" body. They had done the job too quickly to notice three things—that there was no blood on my chest, that my eyes hadn't closed, and under the roar of guns they hadn't heard the bullets making a muffled ring, as they struck against metal under the plastic.

I waited five minutes, just to be sure. They were gone. Then I straightened up, and walked away from the box, hardly aware of the heavy rope snapping like string around me. A ring of fire licked about me. I walked through it, not noticing the flame that burned half my clothes off before I beat it out with my hands. I climbed to the skylight, went down the fire-escape, and through an alley. At the corner I pulled the fire-alarm I found there. No need to let valuable property burn down.

I made my way down dark streets to Jack's place. Within I was laughing, laughing! I wondered what those four gangsters would think if they could see the "man" they had "bumped off" walking along with his "riddled" body. But then I sobered. Adam Link, detective, faced his biggest assignment of all—tracking down the master criminal Harvey Brigg!

CHAPTER V

The Crime Ring

I CALLED Eve on the radio-telepathy. Poor Eve, sitting there in her cell 24 hours a day, unknowing of sleep's blessing, waiting, hoping, perhaps despairing.

"Adam, I want to come to you!" she said almost immediately. "I cannot stand these horrible walls, and the chains binding me, and the cold stares of the prison people. Adam, let me come—"

Don't forget Eve—mentally—was a young, sensitive girl. Not a cold, passionless being of steel nerves. Think of your sister or wife in jail.

"Eve, dear," I said gently, firmly. "You must trust me. It is only a few days now. And then you will be free. I swear it."

Kay, at Jack's apartment, gave a little shriek as I walked in. Small wonder. My clothes were tatters, half burned away, exposing plastic that was seared and blackened. My "chest" was a ruin of what looked like torn dead flesh, with metal shining through in places. The metal was dented where the slugs had struck. My nose was gone. Somewhere, it had been knocked off. I remembered now the rather shocked glances of the few pedestrians I had passed, in the late hour. But they had shrugged and walked on, perhaps disbelieving most of what they saw so dimly.

Jack laughed too, when I told the story. "You took *them* for a ride!" Then he sobered, grinding his teeth. "Harvey Brigg, of all people! Unimpeachable character—in daily life. Lives in a swell home in a respectable neighborhood. But Adam, we're stumped now. You couldn't get anything on him in a year's trying, much less a few days."

"I'll wring a confession out of him," I returned harshly. "I'll—" My hands were working.

"Adam!" It was Kay's voice. She was peering at me in a shocked way.

I understood immediately. In her eyes—the disguise aside—I was a man, a human—a big, strong man, but gentle in nature. It was not like me to speak of brutal methods, no matter what the circumstances.

"Sorry, Kay. Don't fear that I've changed. It's just that my blood boils, like that of any decent man's, thinking

of Harvey Brigg." I spent a few seconds thinking. "A dictaphone! Jack, get me a dictaphone."

"Wire it into the house?" Jack snorted. "My God, man, do you think you're a wizard!"

"Wires? I won't need wires. Get me the dictaphone and then drive me to my mountain laboratory."

In the laboratory, I worked all the next day over the dictaphone Jack procured. It was simple, in a way, to eliminate the need of wires. In some basic mechanical principles, you human technicians are backward. Many things lie just before your nose. My creator Dr. Link—I mean no irreverence—spent years devising my body. In six months after I had come to life, I had improved my body four-fold.

Jack and Kay also patched up my torn chest with new plastic, remodeled a nose, and touched up my disguise in general. A new suit of clothes replaced the rags.

The next night I was behind the hedges of Harvey Brigg's large home, with a black satchel. After some study, I climbed the roof of a back porch, careful so that I came up with barely a slither of my shoes. I forced the lock of an attic window. By leaning my weight slowly and steadily in the strategic spot, the latch clinked apart like nothing more than a snapping stick.

INSIDE, I wound my way past dust-covered old furniture and trunks. Wherever a board under my feet threatened to creak, I let my weight down with measured slowness, changing the sharp sound to a soft rubbing of wood. At certain places I kneeled, with my head touching the floor. Sounds from below, conducted through the walls, vibrated into my mechanical tympanums. The attic, to human ears, would have been as silent as a tomb, I suppose.

I will not detail the hours I snooped in this way, gradually learning, by sound alone, what rooms were below and who was in them. Three servants had retired. A fourth stood in a hall and later let in a late caller. He was led to a room that I knew to be Harvey Brigg's private office or den.

The door closed, down below. The two men were alone.

"Well, Shane?" asked a cultured voice. "How did the job go?"

I hated the voice the moment I heard it. The voice of Harvey Brigg. Oily, smug, with hard overtones in it. The voice of a man whose heart was harder than the metal parts of my distributor "heart."

Quickly, I rigged up my dictaphone system. I laid its pick-up device for sound on the floor. Like my ears, it was sensitive to the faint vibrations working through. If needed, I could have made it sensitive to the chirping of a cricket in the basement.

I had already connected the battery from my satchel. I tripped the on-stud. Five miles away, in Jack's apartment, I knew the recording device was starting. A roll of wax was taking down the phonographic record of what the pick-up device heard, and sent out as etheric impulses. At the same time, I leaned down on the floor, listening for myself.

"It went okay, Boss," the visitor, Shane, said. "But a gumshoe dick was on the trail. Horned in on the boys at the warehouse. They couldn't make him talk so they plugged him, and set fire to the joint. Morning paper told how the fire was put out after burning half the stuff in there. But nobody was mentioned, so it must have burned to ashes. Good work, eh, Boss?"

I could picture them grinning at one another triumphantly. But I was grinning—in my mind—more than they, and for better reason!

"Wonder if that Adam Link put him on the job?" mused Harvey Brigg's voice. "Adam Link is supposed to be a mental wizard, robot or not—" There was just a shade of apprehension in his tone.

"But he don't compare with you, Boss," Shane responded. "You've got twice the brains he has!"

"I think you're right, Shane," Harvey Brigg agreed readily. "Four days from now his partner robot goes to trial. A little planning to pin it on the robot, and three men I had on the Black List were rubbed out. And who gets blamed? Who will take the rap? Not Joe and Lefty!"

There was loud laughter for a moment. Then Brigg's voice came again. "Eve Link, the Frankenstein robot! Read that book sometime, Shane. You'll know why then, at the trial, the jury will slap a guilty verdict on the robot faster than greased lightning. Evidence pro or con won't matter. It'll be just that they'll be *ready* to believe the robot did it! I had that all figured out, you see."

I HAD listened with riveted attention. Two things were clear. That Harvey Brigg was a megalomaniac. Secondly, that he was dead right about the trial—or had been. I don't know which burned in me stronger at that moment. Anger at his cold, deadly plan in involving Eve. Or singing triumph that his own voice, on a wax record, would betray him.

The master mind who had twice the brains of Adam Link spoke again. "Shane, you're a smart boy yourself! But now about the kidnaping. Give me all the details."

Shane went into a recital of the kidnaping. It had been an efficient, cold-blooded job, taking a young woman away from her well-to-do husband.

Then their discussion went into other channels—store robbery, protection fees, even the sale of drugs. Shane, I gathered as I listened, was the sole go-between for Brigg and his widespread "gang." Brigg outlined certain methods of procedure, with a calm efficiency.

As the minutes slipped by, I was amazed at the ramifications of his ring. I began to doubt he could be a human being. He must be a frightful monster, human in name only.

The visitor left after two hours. I heard Brigg get into bed. I sat thinking. My mission was over. Eve was safe. But I thought of more than Eve. I thought of a city of humans preyed upon by this spider and his minions.

There were four days left before the trial. I stayed for three in the attic of Harvey Brigg's home. I did not need food or water. I did not get cramped muscles, sitting for long hours. I signaled Eve once and told her to tell Kay of my decision to stay, so they wouldn't worry about me.

No one disturbed me—except once. A servant was suddenly climbing the attic stairs. I had no chance to run for any item of furniture large enough to hide me. I was exposed to plain view, twenty feet from the stairwell. What could I do? I sat utterly still.

It was a woman. She came up and glanced around, looking for something. Her face turned my way. I froze into complete immobility. Her eyes flicked past me, safely!

I can offer an explanation. The light was dim. My absolute stillness must have deceived her into taking me for an inanimate object—perhaps a bundle of rags. No human being could have escaped. For no human can duplicate the rigidity of something non-living and non-breathing, as I can.

As for not hearing me—my internal hum and jingling seemed loud in the

confined attic—I knew she was hard of hearing. Brigg had revealed once, in the course of his conversations, that he picked his servants for their poor hearing, thus safeguarding himself from any eavesdropping by them.

She went to a trunk, rummaged within, and left. I began to breathe again—no, sometimes I forget I am not human. I felt relieved, however.

CHAPTER VI

I Go to the Rescue

NO other disturbance came, and I went on with my recording. During the day, Brigg was out much of the time. But often he was in, and would closet himself with Shane, discussing their sinister activities in business-like tones. All of this poured into the super-ear of my instrument, and from there invisibly through the ether to Jack's apartment. I had enough, in three days, to damn Brigg in the eyes of any court.

On the third night, something significant came from below. Shane was there again. It was near midnight. They were discussing the kidnaping.

"But he claims, Boss," Shane was saying, "that he can't raise more than \$40,000 by midnight. He wants more time."

Harvey Brigg's voice was adamant. "Fifty thousand dollars by midnight was our stipulation. Since he can't, or won't pay, his wife dies at midnight! Go to the shack now, Shane. At midnight sharp—unless our contact man comes with the money—tell the boys to bash in her skull with the metal bar."

I could sense that even Shane shuddered at Brigg's utterly merciless tone. "But hell, Boss—"

"That's an order, you fool! Don't you understand? This kidnaping

doesn't count so much. The killing will be pinned on Adam Link, the robot! When we pull other kidnappings, they'll pay up promptly, thinking it's the cold-blooded, ruthless robot from whom they can expect no mercy!"

And not knowing—the thought drummed in my brain—that it was the cold-blooded, ruthless Harvey Brigg from whom they could expect no mercy!

"I get it, Boss! It'll make the other kidnappings a cinch!"

"Get going," snapped Brigg. "At midnight, remember!"

At midnight, a woman was to die. I was the only one who knew of it. I couldn't let it happen. I left the attic, where I had been for three days and nights. I moved as swiftly and quietly as I could, leaped from the porch to soft grass, and scurried behind a hedge. Shane's car backed out of the drive and roared away with a clash of gears.

I followed, with an equal clash of gears. For the first time in my two weeks of sleuthing, I let out my full running powers. I passed one late pedestrian. The man stopped stock-still, whirled to watch me, and then staggered to the curb and sat down, apparently sick. I saw that briefly over my shoulder. I might have been amused, except that my mission was so grim.

I pounded after Shane's car as it left the outskirts of town where Brigg lived, out into the countryside. Traffic was sparse. Shane hit up a good speed. I ran along the concrete road's shoulder, about a block behind Shane's car, so that he wouldn't glimpse me in his rear-vision mirror. Auto headlights momentarily lit me up—a human figure racing at better than 70 miles an hour. I don't think the oncoming cars realized my speed. But the two or three I passed, going my way, must have. I can only surmise, as you can, what the drivers

thought as what seemed a man overhauled and shot past them, though their motors were roaring.

I felt a certain exhilaration, using my full machine's powers, after the days in the attic. I suppose it is something like a confined man feeling glad when he gets out and uses his muscles for a change. I raced along after the tail-light of Shane's car, my internal mechanisms humming smoothly. Yet I am glad the pace did not keep up long. I hadn't oiled and checked myself over for two weeks.

TWENTY minutes later Shane's car slowed and turned down a rutty road that presently wound into an isolated woods. Finally it went down what was little more than a weed-grown trail, barely wide enough for the car. It stopped before an old shack, before which another car was parked. I crouched behind the trunk of a tree.

Figures came out with guns in hand, greeted Shane, and they went in. It was one minute to midnight. I did not look at my watch to tell that. I have a sense of absolute time. I know what time it is at any second of the day or night.

In one minute, a woman was to die!

I crept to the shack door, placing my head against the wood, to hear. I heard their voices.

"No word from Slick, our contact man?" Shane queried.

"Nope. The \$50,000 didn't come. What's the Boss' orders, Shane?"

He must have made a silent signal, perhaps with a little spark of pity for the woman who must be awake and listening. I heard the men grunt a little, and one muttered: "Half a minute to midnight!"

"Where's my husband?" sounded a feminine voice, strained and half-hysterical. "You told me he'd be coming

soon—"

That was all I had been waiting for—the sound of her voice. Rather, its position. She was in the rear of the one-room shack. She should be safe from what would happen.

Now was the moment.

Within me, my distributor clicked over little automatic relays that released a flood of electricity through my steely frame. With one blow of my fist I splintered the door in half. I sprang into the room.

Five startled men jerked around. One was in the corner, just picking up a metal angle-iron, ready to crash it down on the skull of the young woman lying bound on a rickety couch. Four pairs of eyes popped, for, with the exception of Shane, they had all seen me before. They were the four who had met at the warehouse.

"God Almighty!" gasped one. "It's the dick we pumped full of lead—"

Their guns barked immediately. I walked straight into the hail of lead. I strode for the man with the bar, jerked it out of his hands, bent it into a loop. Somehow, I had to do that first. It was the instrument of murder which was to have pinned the deed on me.

Then I grabbed the man's gun. He had just fired pointblank at my chest. I crushed it in my hand and flung the pieces at the others. I went for them, but they had stopped firing. They stood like frozen images, faces dead white. The fear in their souls shone from their bloodshot eyes. *Who was this man who could not be killed?*

I stood in the center of the room, defying them.

Shane deliberately raised his gun and aimed for my head. I dodged the bullet, moving my head a split-second before his finger squeezed the trigger. A shot in my eyes would do no damage. Shane shot again at my head. Again it

thudded into the wall beyond. It was like an act in a strange drama. Shane shot at my chest, still with that slow, paralyzed incredulity. The slug spanked metallicly. A dawning look came into his face.

"Cripes!" he whispered. "It's Adam Link!"

With shrieks, they scrambled for the door, clawing at each other to get out. I let them get into their car, outside, then grasped the bumper and overturned it. They piled into Shane's car and I overturned that, spilling them out. They ran for the woods.

I LET them go. I had no wish to harm them. Poor misguided wretches, they were only pawns in the horrible game played by Harvey Brigg. He was the man my slow anger was directed against.

I went into the shack. The woman, who had fainted during the battle, was just opening her eyes. She did not seem any too reassured now, though I had routed her abductors.

"Who are you?" she quavered.

"A detective," I said. If I had said Adam Link, her already strained, haggard mind might have snapped completely. As it was, when I snapped her cords apart like flimsy cotton and picked her up with the ease of a little doll, she gasped. I carried her to Shane's car, which I had previously righted, and drove off.

"Where do you live?" I asked, as I turned on the highway.

She gave me the address. "You'll be home, safe, in nineteen minutes," I told her.

She smiled then. Perhaps her feminine intuition told her I was a friend. A moment later I saw her head back against the cushion. She was sleeping as peacefully as a baby. Good thing, perhaps. I drove that nineteen-minute

stretch to town at a wild pace that would have thrown her into hysteria again. Wild? My driving, at 90 an hour, is safer than that of any human at 20.

She was able to walk up the steps of her home, holding my arm. She fell into the arms of her husband, both choking in joy. I left. I wasn't needed any more. In Shane's car, I drove toward Jack's apartment.

Everything had turned out splendidly. I congratulated myself. Tomorrow was Eve's trial. In Jack's apartment was the evidence that would free Eve and convict Harvey Brigg. His treacherous ring would be broken.

I called Eve on the radio-telepathy, telling her the wonderful news. I had not wanted to make any false promises till now, when I was sure of myself. She interrupted me, excitedly.

"Adam! Why haven't you contacted me sooner? Jack and Tom have been hoping to get in touch with you, through me. Tom was just in my cell this evening again—"

"What's wrong?" I snapped. "Didn't the recording come through?" It was the only thing I could think of. Yet it couldn't be that. I had made thorough tests before taking the apparatus to Brigg's home. But fool, I told myself, why couldn't I at least have checked with Jack? At times, you see, I have quite human failings and lack of reasoning.

"Yes, most of it," Eve returned. "But the first part, three days ago, came through with lots of static. Tom says the voices are so distorted that it won't hold in court."

"The first part?" I went a little cold. "That was the part where Brigg revealed his three murders pinned on you! Eve, what else did Tom say?"

"Tom is worried. He says that although he has enough to indict Brigg on

almost everything else, he won't be able to clear me in time. Brigg will fight his case with powerful lawyers. In the meantime, my trial will have to go on and—well, Tom won't say any more."

I was stunned. I knew what it meant. Eve tried, convicted, and executed long before Harvey Brigg's legal defenses could be battered down. Without that vital bit of dictaphone evidence, destroyed by static, I had gotten nowhere!

Her telepathy-voice came again. "Adam, I'm so lonesome for you. I want to come to you. There is no hope now anyway—"

"Eve, no!" My thoughts crackled. "Eve, you must stay there. Don't despair, darling. There is still a way—"

CHAPTER VII

I Face a "Monster"

I CLICKED off. I wrenched the car around in the street on two wheels for a U-turn. I arrived at Brigg's home in a few minutes. I strode up the front steps to the door, rang the bell boldly.

The servant who opened the door said, "Come in, Shane." I had arrived in Shane's car. But in the hall light, he started. "You're not Shane! Who are you? What do you want?"

"I want to see Harvey Brigg," I said.

"You can't—"

I pushed him aside as though he were a rag dummy and strode for the room I knew to be Brigg's den—or lair. I yanked open the door, walked in.

Brigg looked up from a desk. I was as startled as he. I had expected to see a depraved looking man. Instead he was tall, upright, with smiling features and straightforward blue eyes. No one would suspect him for a master criminal—as no one had.

He frowned. "Haven't I told you

men you must never come to see me personally? Only Shane is allowed—"

"I'm not one of your men, Harvey Brigg," I interposed. "I'm your enemy. I know you for the utter scoundrel you are. You gave the orders that murdered Deering, Pucelli and Unger. Write out and sign a confession to that effect immediately, absolving Eve Link!"

Brigg's blue eyes had narrowed.

"So Adam Link's detectives figured it all out? But how foolish to come here for my confession! You don't think I can be intimidated like a schoolboy?" An amused smile hovered over his full lips.

"You will sign that confession or—" My dry mechanical tones hid the deadly hiss in my meaning. I took a step forward.

"It would interest you to know that my servant—or bodyguard—has you covered!" Brigg nonchalantly waved in back of me.

I looked. The servant-bodyguard I had swept past was calmly leaning in the doorway, with a gun pointing at me.

Just as calmly, I spoke. "At your shack, a half-hour ago, your kidnapers emptied their guns at me. If you look close, you can see the holes in my suit."

I held out my palms, where the plastic had been worn off, exposing the telescoping joints of my metal fingers. I also deliberately clawed at the plastic of my face. The seeming flesh came away in rubbery shreds. There was no blood. The false face fell away to reveal my true one of featureless metal.

"I am Adam Link," I said simply.

THE two men were thunderstruck. Then the bodyguard's gun hissed, with a silencer on it. Five slugs made five new holes in my suit. The sixth, aimed at my head, thudded into the wall beyond, as I dodged. The thug stared for a moment longer, then bolted with

a womanlike shriek from a cowardly soul.

I banged the door shut and faced Harvey Brigg. He was trembling like a leaf.

I spoke at some length.

"Your career is over, Harvey Brigg. I have a dictaphone record of all you and Shane have said in the past three days. But to save Eve Link, my mental mate, I want your written confession for the three murders. The three murders for which, all through the city, they are yelling 'Frankenstein' at her."

I glared at him. My flat phonic voice showed nothing of the emotion I felt as I went on.

"Eve a Frankenstein monster? You, Harvey Brigg, are the Frankenstein monster, created out of the rottenest of human thoughts and aims. And it is you who wear a mask, not I. I have more right to cover myself with human-looking camouflage than you have to hide behind your screen of uprightness. You, Harvey Brigg, are more of a monster than I or my Eve could ever be!"

I leaned over his desk. I placed paper and a pen before him. "Write!" I commanded. "Write the words I dictate. 'I, Harvey Brigg, confess to planning and ordering the murders of—'"

He made no move to comply, just sat there staring at me with staggered shock in his face. He grabbed for the telephone suddenly. I snatched it away, ripped out the wire. I reached over, grabbing his left wrist. "I am strong," I said. "I am a machine. I have never before taken the life of a human. I am prepared to tonight, if only to rid the world of you."

The wrist made a little snapping sound suddenly. I had not meant to do it. I had forgotten my powers.

Harvey Brigg made a gasping shriek of pain. He was mortally frightened now.

"Don't!" he groaned. "Don't kill me! I'll write—"

He snatched up the pen with his right hand and began scratching away, fearful that I would tear him to little bits. His fear was not unfounded.

I heard the noise, but took no account of it. I was too wrapped up in watching the words spill down on paper that would free Eve the next day at the trial.

The door burst open. In it were framed the bodyguard, Shane, and the four kidnapers. The latter, obviously, had flagged or forced a car to stop, come back to town, and met the bodyguard outside with his story.

"Get out!" I roared, advancing on them and waving my arms. "You know your bullets are useless against me. Get out, you fools!"

But they weren't fools. I had underestimated them. I didn't notice till too late what one held in his hand—a bomb-grenade. He pulled the pin and tossed it at my feet. It exploded with a dull thunder.

I swayed, then toppled. The bomb had wrecked my legs. I crashed to the floor. My brain was stunned by the terrific concussion working through my metal body. Another bomb-grenade was raised to finish me off.

"Wait!" It was the voice of Harvey Brigg. He came up out of the splintered wreck of his desk, where he had dived. "Don't throw it. He can't move or run now. Wreck his arms with an axe, while he's still stunned. Hurry! But I want him alive—his brain—for a while!"

The bodyguard returned with a fire-axe from the hall and hacked away at my arm-joints. I was still brain-numb, with no command over my mechanisms. The arms were severed soon, gears and muscle cables jingling loose. I was completely helpless, then, like an armless and legless man.

They stood over me pantingly. Harvey Brigg looked down at me. His formerly mild, guileless face was twisted in a leer of hate and triumph, as he nursed his broken wrist. He had given another low order to his bodyguard. He reappeared with a blow-torch.

"I can't break your wrist and make you suffer," Brigg said to me. "But we'll try this—"

At his order, the blow-torch's hissing flame was applied to my head-piece. All around evenly. The metal began to heat up.

"We'll fry your clever metal brain in its case!" gloated the human monster named Harvey Brigg.

CHAPTER VIII

The Final Hour

PAIN came to me, or its equivalent in my robot sensations. The heat began to throw my delicate electron-currents off, creating static that hammered like a frightful headache. I groaned, but this time in reality, not like when matches had been applied to my chest plastic. Diabolically, Harvey Brigg had known this would be torture to me.

Through the pain I heard his voice.

"With you out of the way, Adam Link, your Eve Link goes to the chair for those murders. As for the dictaphone record your helpers have, I'll fight it tooth and nail. Dictaphone evidence is never conclusive. I have a good chance of going scot-free, or maybe getting convicted on some minor count that won't break up my ring." He laughed derisively. "Adam Link, detective! This is your first and last case. Goodbye!"

I was going fast and he knew it. I felt a little surge of consolation as the man with the blow-torch, kneeling at my side, accidentally hooked his coat in

the belt stud of my radio-telepathy unit, turning it on. It was still intact, within my chest space. They knew nothing of the silent telepathic call I sent to Eve.

"Goodbye, my Eve," I called. I gave brief details. "Go through with the trial, as I did once. If you're saved by a miracle, carry on what I have tried to do—show humans that intelligent robots have a place in human society. Goodbye, dearest!"

There was nothing more to say. I didn't want to say that there was no hope, not even for a miracle. She would join me in non-existence soon. The advent of robot-life in the world would end with the epitaph—"Died in infancy."

"Adam—"

That was the only word Eve said, in return. Or shrieked. It registered as that in my electronic thought currents. When I tried to contact her again, I failed. Some wire or connection had slipped, probably loosened by the bomb concussion before.

That would be my last word from her, I reflected through my agony. "Adam—" It had held a world of meaning. Anguish, loyalty, love. A love, though unbiologic, that equals the highest of your human loves. And in that I felt a calm peace. The peace before death.

In ten minutes my head-case had begun to glow dull red. The outer iridium-sponge cells of my brain were shriveling, melting, paper-thin as they were. I longed for death. But my consciousness clung to my life-current. I was amazed myself at the tenacity of "life" within me. The heat that would have burned a human brain away in seconds had still not conquered mine.

But it would. My thoughts began to reel, plunging down into the pit of extinction. I was half-insane, so far gone that I suddenly imagined I saw Eve's gigantic form standing in the doorway.

"Adam!" the image seemed to cry. "What are they doing to you? Are you still alive—"

Cold shock swept over me, as the blow-torch tumbled from cruel hands and all the men whirled as if shot.

Eve was really there!

BROKEN lengths of chain still hung from her wrists, ankles and neck. Chain that she had snapped like rotten cord, in one furious tug, after I contacted her. I could surmise the rest. She had wrenched the cell-door off its hinges, brushed screaming jail officials aside, and run out of the prison. She had come in ten minutes across town. She must have run at express-train speed. She must have sent more than one late pedestrian or motorist shrieking for cover, as her giant metal form careened through the night streets. She knew the address, through Tom. She had found the way by sheer instinct, or perhaps by clutching some luckless human in her mighty hands and demanding directions.

All that aside, she was here.

The men were frozen, eyes horrified. Harvey Brigg backed away to a wall and flattened himself against it as though to push through. For they all saw that the creature before them was berserk.

She was a jungle creature, come to save her mate. A metal woman, rescuing her Tarzan. She screamed—awfully. She advanced with slow, ponderous steps, shaking the floor. One man broke from his trance to hurl a chair at her. She caught it and crumbled it to matchwood in her alloy hands. She battered a table aside, splitting it in half with one blow of her fist.

Slowly and steadily she advanced on the seven men cowering in the corner. She thought I was dead, seeing me in a tangled ruin. She was fully intent on

crushing those seven men to pulp.

I tried to call out, stop her. But my mechanical larynx was heat-warped to uselessness. I could not make the slightest move, to show I was alive. I could not even click shut my eye-shutters, to blank out the sight. I would see seven men ground to bloody shreds. More than that, I would see the robot once and for all banished from life in human society, for that act.

"Eve!" I tried to plead. "Eve, don't betray me now. Don't do just what I've warned against from the start. Don't prove the robot is just what the world is too readily to believe—a Frankenstein monster! Eve—please—don't!"

But I couldn't make a sound. My mental agony at that moment was far greater than the heat-torture had been.

Eve was within reach of the men. They were clawing at one another to get out of the way. They too were silent, with fear strangling them. Eve's merciless hands stretched out, for the first victim—

A siren wailed, somewhere outside, moaning to high crescendo. Eve had caught one man, trying to slip past her, and hurled him back in the group, as though intent on making them suffer the suspense of death as well as death itself. She seemed to tense herself for sudden activity, her internal hum deepening. She was about to commit wholesale massacre. . . .

Then blue-clad men were swarming into the room—police! I shrieked and cursed, within myself. She would rend them apart too! She whirled on the police, as they shouted—

At that moment I found my voice. My heated metal had cooled enough for parts to slip into place. It was only a croak, my voice:

"Eve! Stop! Submit to the police. Don't touch the men!"

She stood in the center of the room,

looking from the police to the men, and then down at me—or what was left of me. She made no move against any of them.

The gangsters found their voices. Babbling, they begged the police to protect them from the metal monster.

"Make them confess!" I yelled out, my voice stronger now. "Make Harvey Brigg confess to the murders Eve is accused of, and all his other criminal activities!"

Eve looked around at Harvey Brigg.

"I'll confess," he cried eagerly, frantically. "I'll confess everything. Only don't let that robot touch me!"

I have only one more thing to record. We were in our mountain cabin, with Jack, Kay and Tom, court procedure over. I had a new body, and Eve was in her first one, human proportioned.

"We won all, but we nearly lost," I said. "If the police hadn't come in time—" I shuddered mentally. "Eve, you must never—"

"I wasn't going to harm the men," Eve said. "I kept my head. I knew about the ring. I knew if I frightened them enough they would confess. I knew the police were coming. What's more, Adam Link, detective—I knew you were alive all the time. One of your broken cables twitched slightly. I saw that right away!" I knew she was laughing a little then. "Poor dear, did you really think I had gone berserk?"

Paradoxically, I was nettled. "You mean you weren't ready to—well, avenge me, if I *had* been dead?"

"Now, dear, that's just what you *wouldn't* have wanted—"

One word began to lead to another.

Our three friends arose to leave. "Your first quarrel!" Jack grinned. "Come on, Kay and Tom. We're excess baggage. And if Eve starts throwing things—"

THE END

» LILINE, « THE MOON GIRL

BY EDMOND HAMILTON

“DAVID, awaken!” The voice came again to David Madden, and the strange vision that for six long years had haunted his dreams. He knew that he was sleeping, and he knew that the vision of Liline was coming.

Madden’s mind seemed strangely divorced from his sleeping body. He seemed somehow to *see* himself lying there in slumber in his bare bedroom, a hand protecting his eyes from the silvery moonlight. A white shape, that swept down a silver pathway. Coming closer, gliding down the beam and through his open window, until it hovered above his sleeping form.

It was—Liline.

He recognized her in his dreams. She was as always, supernally strange, supernally beautiful.

Her face was clearest, as always. A soft oval, with dark hair brushed back from a high, broad forehead, with dark eyes that were always so serious and tender, looking down now at his sleeping form in apprehension.

“David, you must *awake!*” she was whispering as her misty figure bent over him. Now that was strange, David Madden thought in his dream. Never before had Liline wanted him to awake. She had always discouraged him, tried to induce him to abandon the work that for six years had engrossed him. But now there was a new urgency in her face.

“Liline!” he murmured in his dream. “You’ve come again—”

“The rocket—in danger, David!” she kept whispering urgently in the dream. “Awake—you *must!*—”

The sheer fear in her face reached his own heart. He felt his pulse leap with vague terror. Suddenly, he was awake. Dazedly, David Madden sat up in bed and looked a little wildly around. He was in his familiar, bare little bedroom in the bungalow near the rocket-workshops. It was past midnight. The solemn stillness of the deep night was unbroken. The solemn black crags of the Colorado mountains were sentinels on the lonely plateau.

He looked out. In the middle distance, beyond the low, dark workshops, the towering metal bulk of the rocket *Moonflower II* loomed like a huge upright torpedo from its cradle. Nearer to him a similar but smaller tarnished metal bulk towered from a similar cradle.

Madden’s blond, worn young face was taut in the silver light, his blue eyes wide as he stared out. He tried to dismiss his alarm. After all, Liline was

A STRANGE, sweet voice comes to David Madden in his dreams, and warns him of an awful menace on the moon. What was the strange secret of the flame and its lovely watchers?



"Don't shoot, David," came a clear voice. "It is I, Lilian!"

only a figment of dreams. For six years, for all the time that she had appeared in his dreams, he had known that this vision of her was only a product of his own overpowering obsession.

DAVID MADDEN'S obsession was the moon. For years, it had been the goal of all his hopes. For he meant to be the first man ever to reach that barren, shining sphere. The first man ever to reach another world.

That was why he had spent years here on this lonely plateau, spending his inherited fortune in unending research and rocket-trials. First alone, and more lately with the help of Theron Leigh.

His obsession with that purpose, Madden knew, was why this strangely persistent dream had haunted him, warning him over and over, with grave persistence, that he must give up his rockets and abandon his hopes of reaching the moon.

Liline. Her name had somehow come to him. Madden knew she must have been born of his own too-desperate obsession, expressing his own subconscious fears and doubts. Yet—it was a strangely dear illusion, one whose coming he had eagerly awaited in his dreams.

But now—this fear and warning! But if Liline were only . . . then this vague alarm he felt must come from the depths of his own mind? Madden felt that there was something wrong. He could sense something furtive and menacing, taking place tonight.

He dressed quickly. He wouldn't arouse Theron Leigh—there was no reason—but he needed to reassure his disturbed imagination, before he could sleep again.

Outside in the nipping chill of the Colorado night, everything on the plateau slept in silver silence. He felt a little ashamed of his apprehensions as

he walked on toward the workshops. He was getting jumpy, he told himself. But no wonder, with the start into the void scheduled only two days ahead.

Madden came to the drab, looming bulk of the *Moonflower I* just beyond the workshops. A dull, corroding mass, squatting in its cradle of girders like an earthbound bird. He could still remember his black disappointment when Rocket One had proved unsafe for flight and the temptation that had assailed him to give up his apparently futile work. And in his dreams, that vision of Liline had urged him to abandon his work.

But he had built another! The *Moonflower II*, with the help of Theron Leigh, had been built in two years of ceaseless work. Madden's eyes clung fondly, as he advanced, to the clean gleaming bulk towering there so proudly beyond the low supply-sheds. Ready to start, in two more days—

Abruptly, he stiffened. In the shadows at the base of Rocket Two, he glimpsed a shadowy, moving form!

A FURTIVE figure, carrying a case of instruments toward the gangway that led up to the open door of the rocket. It could not be one of his own workmen—they had been paid off a few days before.

Madden plunged forward with an inarticulate cry. The hurrying man in the shadows dropped his burden and whirled around. A pistol leaped into his hand, gleaming in the moon.

"Stop!" he ordered harshly.

Madden looked unbelievably at the man who confronted him with the gun. "Jacob Graff!" he exclaimed—for he had recognized that lean, purposeful figure; that harsh, forceful, aquiline face and domineering black eyes.

"Yes, my dear young Madden, it is I," Graff said raspingly. "And I am

just about ready to take off."

"Take off? Good Lord—do you mean that you are—"

"I'm stealing your rocket, yes," Jacob Graff said coolly. "You wouldn't sell it to me, Madden. So I'm taking it."

Madden stared dazedly. It had been only a week before that this European scientist who called himself Doctor Jacob Graff had come to the lonely plateau. Graff had offered to buy the *Moonflower II*. Had made an astounding offer for it.

"Your rocket should be able to reach the moon," Graff had said. "I've followed your progress lately and I want that rocket. I want to be the first man on the moon—I've got to be. I built a rocket myself, but it was a failure. Then I read of your *Moonflower II*. I must have it. My syndicate will pay ten million dollars for it."

"Would you sell your life for ten million dollars?" Madden had demanded. "That's what this rocket is to me—my life."

Graff had seen the uselessness of further offers. He had left. But now here he was—stealing The Rocket. "You wouldn't sell," Graff was repeating harshly. "And I've got to be the first man on the moon, Madden. I told you that. There's something there that I must get—for the Master."

"The Master?"

Then enlightenment flashed over Madden. He suddenly realized Graff's nationality, as he recognized his accent. "I know you now!" he cried. "Graff—the rocket-engineer of the Central Empire—your Master is the Central dictator!"

"Yes," rasped Jacob Graff. Fanaticism burned in the lean engineer's black eyes. "The Master—whom I serve, and who needs a means of enforcing his demand for expansion!"

"That strutting tyrant who has menaced world peace for years," said Madden. "You want to go to the moon to get something for *him*?"

Graff's eyes blazed. His voice was thick with fanaticism, his lean, dark face transfigured.

"The secret—the thing on the moon that I have discovered will make our Empire irresistible!" he exclaimed. "And mine shall be the honor of going after it—"

"You're not going in *my* rocket!" Madden said slowly.

He plunged forward. And Graff shot.

MADDEN felt a crashing shock against his skull. Wildly, he fought to keep from losing consciousness. He heard, as though from a great distance, Jacob Graff running up the gangway into the *Moonflower II*.

There came the slam and grind of the rocket door closing. Madden heard dimly the thin, remote voice of Theron Leigh, shouting in alarm. He knew that Leigh had been awakened by the shot and was coming running.

Then a colossal, thunderous roar of sound broke. Madden felt the ground heave and rock violently under him. A wave of superheated gases rolled over him scorchingly. His mind slipped into throbbing darkness.

CHAPTER II

Pursuit into the Void

DARKNESS, darkness—he seemed floating in it, and there came through the blackness of his mind a misty, shining shape, gliding swiftly into his mental vision.

Liline! Slender, lovely moon-wraith, her dark hair blowing, her white face pale and urgent with alarm. "David, listen to me!" she was crying to him,

in far, thin, silver tones. "Listen!"

"Liline," his mind seemed to murmur as he floated in that dark sea of unconsciousness. "I see you—I hear you—but you're not real—"

"David, I *am* real! It is my mind that meets your mind, that has done so for long, in your dreams. But my body is as real as yours, though it is far from yours.

"The real I, the real Liline, dwells in the moon, David. I am one of the last of the Watchers of the Fire, who for generations have kept ward and watch upon the forbidden flame. I and Tula, my sister—we two are the last of the Watchers, the last of the moon-folk. It is our duty to keep any from attaining the Fire. That is why I have long discouraged you in your rash resolve to reach the moon.

"But now there is danger, David—terrible danger. I have seen with my mind. The man Graff who has stolen your rocket is even now speeding toward the moon. He comes to steal the forbidden Fire for his master."

Madden's darkened mind quailed beneath the terrifying impact of the girl's anxiety and dread.

"It is the duty of my sister and me to prevent him from stealing the Fire," Liline was crying. "But my sister Tula has forgotten her duty. She is weary of our lonely life here and longs to go to Earth. It was Tula who inspired the man Graff to come here, speaking to him in his sleep as I have spoken to you, offering to give Graff the precious Fire if he will take us to Earth.

"Death for your earth, if Graff brings back the Fire to it, David! A death more horrible than you can imagine. He must not reach the Fire. Alone, with my sister against me, I fear I cannot prevent him. You must help me—you must follow, swiftly and at once, to the moon!"

Her voice in the dream was fading, her shining, misty figure vanishing, as consciousness began to return to Madden.

"Liline!" he felt himself crying desperately. "Liline, I cannot follow—I have no way—"

"Follow!" murmured the last, fading accents of the vanishing vision. "For the life of your world, David—"

She was gone—the stupor of unconsciousness was lifting from him, and she was passing with it.

Stinging tides of pain rolled across David Madden's brain, as consciousness came back. He groaned, and felt hands supporting him.

"DAVID!" an anxious voice was crying in his ear.

He opened his eyes. He lay there in the moonlight upon the ground. Theron Leigh, his thin, middle-aged face desperately anxious, was supporting him.

"David, what happened?" the scientist was crying. "Our rocket — it's gone!"

"Jacob Graff stole it," Madden said thickly, trying to sit up. Great waves of weakness and pain were surging through him. With a shaking hand he felt his head. Graff's bullet had torn a furrow in his scalp. Leigh had bound it up with a handkerchief to stop the bleeding.

"Graff gone in the *Moonflower II*?" Theron Leigh whispered in stunned amazement. "My God—why—"

"He's gone to the moon," Madden choked. His blue eyes were wild as he looked up. He pointed a trembling hand. "Some tremendous weapon is there and Graff wants it for his master, the Central dictator. It's something called the Fire," he said thickly. "A mysterious Fire of some kind, in the moon. Liline told me—"

"Liline?" repeated Theron Leigh, his

thin face pale and wondering.

Madden told the scientist. Told him of Liline, of the phantom moon-girl who had visited his dreams for years, who had tried always to dissuade him from building a moon-rocket. And who tonight had warned him of the dread possibilities ahead.

Leigh's face grew strange as he listened. But he did not react skeptically, as Madden half-expected.

"It's possible, then," Theron Leigh muttered. "Perhaps some sort of extra-sensory perception is a reality. This Liline—she has that power, can contact your subconscious mind in sleep or stupor. But—a girl in the moon? And she said she had a sister—the last two of a lunar people? It seems impossible. And yet—"

"I believe in her, utterly," Madden said. He had stumbled to his feet and his face was feverish as he clutched the little scientist's thin shoulder.

"Leigh, she begged me to follow Graff! She told me that if Graff brings back the Fire to Earth, it means a black evil loosed upon our world—a world already riven by war. We must go after Graff—to the moon—to stop him."

Theron Leigh's fine, thin face became more pallid, and a shadow of dread like the shadow of approaching eclipse darkened his dilated gray eyes.

"But we *can't* follow, David! Graff has taken the *Moonflower II*—and it would take us two years to build another like it."

"We can follow—in *Moonflower I*," Madden said coldly.

THERON LEIGH recoiled from the suggestion. "Good God, David, that would be suicide! You know as well as I that the rocket is rotten with defects!"

"It's our only chance to follow Graff."

Leigh's gray eyes were clouded dark with fear. "We'd be staking our lives on

the thinnest chance," he muttered. "The firing-tubes might blow out—the flawed plates might give way—" and then Leigh paused, his lips thin. "You're right. We must follow, in *Moonflower I*."

And now, even in the driving urgency of overshadowing peril, David Madden felt a queer pulse of joy. Liline was real—he knew it, now. The moon-girl of his dreams, real and living—and he was going to her.

When the next day had passed, when night came again to the lonely plateau, Madden and Theron Leigh had almost finished their frenzied preparations. The rocket ship had been moved in its cradle of girders, so that it pointed to exactly the right quarter of space. The eight cellular firing-sections at its base, each of which would be blown away as its fuel was used, had been filled with the highly explosive and unstable liquid fuel.

Two space-suits—ones that they had devised several years before—they put into the rocket. The newer, better suits they had made were in Rocket Two, with Graff.

All their equipment was faulty, flawed, discarded. It seemed mad to think that they could succeed with this defective rocket and equipment.

The moon rose. It was slightly past its full now, shadow eating at its limb, a blank, shining mystery, spinning up into the heavens.

"Graff—he must already have landed out there," Leigh muttered, staring upward.

"Help me with these tanks!" Madden cried. "We've only two hours more!"

Zero hour was one hour before midnight. The calculated moment when Rocket One must rush out at a speed topping seven miles a second, to escape Earth's gravitational grip.

The two men, panting and reeling

with fatigue, climbed the ladder to the door in the nose of the rocket.

Theron Leigh's thin face was bloodless as his fingers fumbled to fasten the straps of the shock-absorbing harnesses. Madden unlocked the bank of eight keys that controlled the eight firing-cells. "Watch the chronometer — tell me when," he said harshly.

His finger poised above the key of the sternmost firing-cell. The drone and throb of the oxygenator was the only sound.

"Time!" cried Leigh.

Madden's finger jabbed down the first firing-key.

He had expected a tremendous shock. He was not prepared for the awful and cataclysmic reality.

The world seemed to explode in an ear-splitting roar. Tortured springs of his recoil-harness shrieked rustily as he and Leigh were flung deep into the shock-absorbing harnesses. His brain felt as though lightning had struck him.

So much more terrible was the shock than he had expected, that he thought at first that both he and Leigh had been annihilated. Then as his stunned ears regained faint power of hearing, he dimly heard Theron Leigh's cry.

"David, all eight of the firing-cells let go! Not just one—all of them!"

Madden forced pain-throbbing eyes open, focused his blurred gaze on the illuminated dials.

It was true. The exploding of the sternmost firing-cell had touched off all the eight cells. The whole back half of the rocket had been blown off in the start—all its fuel flaming out to hurl it at terrific speed away from Earth. *Moonflower I* was now only a powerless metal shell, racing through the void toward the moon!

"The cells—they were flawed," Leigh muttered. "The explosion back-blasted from one to another. All the fuel's

gone! And we've no power to break or fall onto the moon. We've no power to get back to Earth—ever."

"We'll get back," Madden said savagely. "The second *Moonflower* is on the moon. We'll find it and come back in it—after we've found Graff."

He peered out, sick and shaken. A pitch-black abyss yawned before them. The countless stars were like brilliant witch-fires. And far ahead in the great vault swam the gleaming sphere of the moon. The craters and ranges on its shining face standing out bold and clear. Madden stared shakenly. World of his dreams, savage, airless, barren satellite that he had watched so often. And now he was hurtling toward it—and toward Liline.

CHAPTER III

Disaster on the Moon

HOURS sped on into eternity, as the rocket rushed soundlessly on. The earth, misty, cloud-veiled, huge, bulking vast in the heavens behind them. And ahead, the silver moon-sphere, a stupendous, white-glaring panorama of peaks and craters and blank plains.

Theron Leigh had focused the little telescope whose lens was inset in the rocket wall, and was peering through it. His thin form still trembled from sickness and shock.

"Our rocket—I see it!" he cried. "West of Bulliadus crater—"

Madden sprang to his side, and applied his eye to the lens. Into his vision sprang magnified a section of the white lunar plain near the towering ring of Bulliadus crater. Something there on the broad plain flashed and glittered metallicly.

"Graff may still be near the rocket—he's been less than twenty-four hours on the moon. If we can land near it,

and find him—”

Leigh laughed mirthlessly. “Land near him? We have no way of steering or braking now, with our power gone. We’ll just have to trust to chance, to land alive.”

The *Moonflower* I swept down in a dwindling curve, caught in the gravitational grip of the great satellite.

At five hundred miles altitude they sped smoothly around the western limb. On around the moon, in that steadily decreasing spiral.

Beneath lay a landscape no man on Earth had ever seen—the other side of the moon. It was little different from the familiar side. Giant craters and stupendous mountain ranges, and flat desert plains. But all cloaked in shadow. And then a thin edge of dazzling brightness showed ahead, broadening. They had circled the dark side of the moon and were coming back to its sunlit face, and dropping.

“We’ll hit in a half hour at this rate,” Theron Leigh muttered. “And not far from Bulliadus, I think.”

“Put on your space-suit,” Madden said. “If the rocket cracks up in landing, it may give us a chance.”

They donned the bulky, air-tight garments of leathery fabric, and screwed on the windowed helmets. Each made sure that the tank of his suit was pumped full of highly compressed oxygen. Then they clumsily strapped themselves into the recoil harnesses again, adjusted their suits’ telephonic connection, and waited.

They could make out great, black fissures in the lunar plain below. Cracks in the moon, opening into unguessable depths. Lower the rocket sagged—

“We’re going to hit!” came Leigh’s shrill, muffled cry. “And we’re still a long way from Bulliadus!”

Madden’s gloved hands gripped the bars of his chair. Soundlessly, the metal

shell sagged downward. The jagged lunar plain rushed up toward them—

CRASH! The springs of Madden’s harness screamed and broke. He felt himself catapulted back against a wall. He lay, breath knocked out by the shock, more than half dazed. The whole control-room was topsy-turvy.

Then in the silence, he heard the thin, hissing scream of gas. He knew what it was. Air escaping from the wrecked rocket and its riven tanks. “Leigh!” he called hoarsely, his voice loud in his helmet, his head ringing with pain.

Theron Leigh was moving in his harness. His space-suited figure stirred clumsily.

“All — right,” his muffled voice reached Madden by the telephone. “Thank God for the weakness of lunar gravitation. It’s all that kept us from being squashed like flies.”

Both men, clinging to hold themselves upright, stared around them. The walls of the rocket were crumpled and cracked. Outside a shattered quartz window lay a white, glaring desert beneath a night-black sky of stars.

“The oxygen-tanks are gone,” Madden gritted. “That means we’ve got to get to the other rocket before the oxygen in our suit-tanks is exhausted, or we’ll die. Six hours, maybe—”

“Fifty miles away,” Theron Leigh said quietly. “Beyond Bulliadus crater. We can never make it.”

“We’ve got to! We’ll get to the *Moonflower* II, replenish our oxygen, and then find Jacob Graff—and Liline.”

“Liline?” said Leigh. “I believed it before, but can anything live on this ghastly airless world?”

“Liline and her sister are somewhere here,” Madden nodded. “We’ll find them, and Graff. But first—the rocket.”

Time was precious. Each minute was further decreasing the amount

of oxygen in their suit-tanks. They clambered clumsily to the door, wrenched it open, and emerged into the lunar day.

NIGHTMARE landscape greeted their eyes. The glaring white plain of calcined dust and stone, stretching to the towering peaks that rimmed a horizon incredibly close. Overhead bulked the incredibly huge cloudy gray sphere of Earth. Its vast, veiled sphere seemed to fill the heavens. And beyond it, the sun glared fiercely, beating down with a scorching heat they could feel even through their insulated suits.

The two men started westward, toward the fanged peaks. They moved with a queer, floating drag. Only the lead weights fastened to the belts of their suits kept them from floating into the air with each step, so slight was the pull of lunar gravity.

The wreck of their rocket vanished from sight behind them as they forged on. Neither man spoke, as they toiled forward. A fissure blocked their path. A chasm several hundred feet across, running northwest to southeast. They stopped, baffled.

Madden peered down into the chasm. It seemed a bottomless abyss of blackness. He thought he could make out faint green light far below—or were his strained eyes deluding him?

"We must skirt this fissure northwestward," Leigh was saying. "It won't take us far out of our path."

Presently, indeed, they came to the head of the fissure, and passed around it and headed straight west again. But they had lost precious minutes and oxygen in the detour.

Bulliadus' crater-peaks seemed little nearer, as they forged on. Foreknowledge of doom began to toll in David Madden's heart like a cold bell. He

was going to die here on the moon.

Four hours had passed, and the peaks of Bulliadus loomed appreciably nearer and larger, when Theron Leigh fell. The little scientist struggled weakly to rise, his gloved hands clutching the calcined white dust.

"Can't—go much further," he gasped as Madden helped him up. "Better go on—without me—take what oxygen I have left."

"No!" Madden grunted. "We'll win through! The rocket can't be far away now."

"Twenty miles, at least," Leigh's dry, hopeless whisper came over the telephonic connection.

But he stumbled on, beside Madden. They passed another fissure, another fissure, another black abyss that ran east and west, and lay a little north of their course. Madden dreaded to see one of the chasms across their path at any moment.

He cut the rate of flow from his oxygen-tank, and Leigh followed his example. It would lengthen the time left them. But the lessening of the oxygen began rapidly to bring on a dizziness and shortness of breath.

In a half hour, Leigh fell again. And this time he lay without attempt to rise.

"Done for," came his choking whisper.

Madden's head was roaring, his breath coming in short, thick gasps. The trickle of oxygen from his tank seemed rapidly diminishing.

Madden lifted up Theron Leigh and staggered forward, a step—two—and then he fell! His bleared, hazing eyes could no longer make out the peaks of Bulliadus ahead. He lay for a long minute across Leigh's motionless body. His whirling mind, his aching muscles and starved lungs, craved rest.

He staggered up once more, reeled blindly forward, carrying his com-

panion. But when he fell again, Madden knew it was the end. Darkness came mercifully over his brain in long, slow waves. The reward, he was thinking numbly, of six years of toil and hopes and dreams. . . . death — and Jacob Graff going ahead . . . rest . . . he wanted only to rest. . . .

"David, don't give up!"

Out of the welling darkness that was sweeping over him in soothing tides, Liline's crystal, frantic voice reached his mind. As though from very close at hand, now—very loud.

"David, I've been trying to tell you! But I could not reach your mind while it was awake. You must get to one of the fissures—the nearest one. Get there with your friend—and jump in."

"Jump in?" Madden thought dazedly. "But that would be death—"

"Not death, but life! Get to the fissure, and jump."

"I can't do it—I can never do it." Madden's thoughts were wandering. "I can't get up again. Liline—"

"No!" Frantic, desperate pleading in the silver voice that rang inside his mind. "Get up—for me! And for your world! Even now, the man Graff is with my sister, Tula, plotting to possess the Fire. You *must* get up."

Madden was dimly aware that he still lay with Theron Leigh upon the glaring lunar plain. His lungs seemed on fire—the last trickle of oxygen from his tank was lessening.

He reeled to his feet. It was a ghastly effort to do that, and another to reach down and pick up Leigh's slight, helmeted form. More by instinct than by conscious design, he staggered northward. He felt the last strength and life running out of him like the final sands of an hourglass.

And suddenly, the fissure was before him—a black, awesome chasm yawning across his path.

The oxygen from his tank had ceased. His flaming lungs seemed ready to burst. And then, like a spent animal lurching forward to die, still clutching his senseless companion, he reeled forward off the edge of the fissure and plunged falling into the abyss.

CHAPTER IV

The Girl in the Moon

DOWN, down—that fall was weirdly like a fall in a dream, to David Madden's dulling mind. His sensations were chaotic in the moments that he and Leigh plunged downward, turning over and over in the blackness. He dimly perceived that there was light below—green, faint glowing light.

And then he heard the whistling of *air* around his helmet as he fell. They were tumbling down now through air and not through empty space!

Green, vague spaces unfolded with terrifying rapidity beneath them. Shining green-patched walls flashed up past them. And they met the bottom of the fissure.

Not with a rending shock, but as though they had alighted softly upon a great cushion, did they strike bottom. The shock jolted Madden's weakened brain and body into a last effort.

He fumbled with a stiffening hand at the escape-valve of his helmet. It opened — and precious, life-giving air rushed into his helmet, into his starved lungs.

Leigh was lying half across him, as he had fallen. In a moment, Madden had his companion's helmet off. He ascertained that Leigh's heart still beat. The older man began to twitch and stir, as strength returned.

David removed his own helmet and stared around him weakly. The scene that surrounded him was unearthly

A cavern of great size, illuminated by

an eldritch green glow, stretched around them. Its towering walls of jagged black rock supported a rocky roof. The green glow that illuminated this cavern came from eerily shining fungi like huge mushroom growths, that grew upon the cavern floor and crowded the soft black soil as far as the eye could reach.

Madden discovered that he and Leigh had fallen upon one of the huge fungi. Their space-suits were smeared with the shining green fibers they had crushed beneath them. Madden turned. His companion had regained consciousness, and was gazing about with wild, dilated eyes.

"We're beneath the moon's surface," Madden told him. "Liline reached my mind as I was near death, up there, and told me to jump with you into the fissure. It's all that saved us—the air down here."

"Air, here beneath the moon's surface," Leigh whispered. "Then they were right, the astronomers who suggested that the moon's atmosphere long ago drained into a cavernous interior. Yet this place—incredible!"

They got to their feet, still weak and trembling, and divested themselves of the heavy space-suits. Each movement made their bodies aware of abnormal lightness. Madden gazed down the length of the great, green-glowing space but he could not see the end of the cavern.

"David, look!" Leigh suddenly shouted.

The older man was pointing wildly down the green-lit cavern, toward the haze that veiled its farther spaces.

Something there was moving—something black coming with flapping wings, flying through the green-lit spaces toward them.

"A bird?" whispered Theron Leigh, his thin face frozen as he stared.

"Too big," Madden exclaimed. "It

looks like an enormous flying lizard." Then he cried, "That's what it is! And it's seen us!"

He clawed out the heavy pistol in his jacket pocket, and wildly raised the weapon.

THE thing that was flying toward them down the vast, green-glowing moon cavern was a monstrosity. A gigantic black winged lizard, whose flapping, leathery pinions had a spread of forty feet, and from whose barrel-shaped body projected a long, snaky neck that ended in a turtle-like head. The flapping of its wings was like a threshing thunder in the eery stillness of the cavern.

Madden shot. The crack of the pistol was followed by a hissing cry of fear or rage from the winged monster. It curved sharply upward. Then a silver voice pealed down to them.

"David, don't shoot! It is I—Liline!"

"Liline!" cried Madden, staring wildly upward.

Liline—riding the back of the enormous flying lizard. He saw her, now, as the lizard curved fearfully away.

A slim, white-robed shape, clinging to the back of the scaled, winged monster. Dark hair flying back in the wind, her face a white blur as the frightened lizard sped past.

They heard her crying in silvery tones to the creature. And presently, with wings flapping, it curved around and came back down through the greenish gloom.

Cautiously, fearfully, the giant beast came to rest on short, thick legs, a hundred yards from them, crushing the shining fungi under its webbed feet. Liline's slim figure leaped from its back and came running lightly through the glowing growths toward them.

David Madden's heart pounded furi-

ously as the girl approached. She paused, and for a silent moment he gazed with wild, yearning excitement into her face.

Phantom moon-girl of his dreams, at last standing real and living before him! Her soft, childlike white face clear and beautiful now as it had been in the dreams, her dark eyes pulsing with strange emotion. She was garbed in a short white robe of silken stuff, belted by a jewelled girdle. Her black hair was tossed back from her broad, high forehead, her slender, youthfully rounded arms and legs bare.

Earth-man and moon-girl, they stood gazing breathlessly into each other's faces in the greenish glow of the shining fungi, oblivious to all else. And then they moved toward each other. And David Madden found Liline in his arms.

"It's not real," he said.

"David!" she whispered. Her dark eyes were misted pools as she looked up at him. "I've always loved you since first my mind came to you, years ago. Even though I thought that never should we two meet, who were separated, on different worlds."

"And though I thought that *you* were only a wraith of my dreams, I loved you, Liline—I always did, I always will."

Strange climax to those six years of haunted dreams—this meeting in the eldritch moon-cavern! The strangeness of it shook him, even as he held Liline warm and living in his arms.

Then both turned and approached Leigh. "You—David's friend—my friend," Liline said to the staring older man, a warm smile lighting her face.

"Why, I can understand you!" Leigh exclaimed incredulously. "Even though you're not speaking English, or any other language I know."

Madden suddenly realized the queer-ness of that. "Lilene, how is it that we

are able to understand you?"

"It is my mind that speaks to your mind, that you understand, David," the girl told him. "We of the Watchers always spoke thus to each other and to our beasts. We Watchers could always cast our minds afar, even to other worlds. That is how I was able to send my mind to you when your mind slept, David. But there is not time to explain now," she said rapidly. "You must come with me and prevent the man Graff from reaching the Fire!"

"But what *is* the Fire, Lilene?" Madden said, bewilderedly.

"We dare not delay here for explanations," Lilene said urgently. "We must return at once to the dead city where the man Graff plots with my sister Tula. But this much I will tell you—the Fire is a blaze of atomic energy in a space at the center of the moon—a mass of matter flaming through the ages by the conversion of its electrons into pure energy."

"Atomic fire?" David Madden exclaimed stunnedly.

"Good God!" cried Theron Leigh. "Atomic energy in the hands of Graff's country, of that mad dictator!"

"If the Fire is taken to Earth," said Lilene, "if Graff's people try to use it as a weapon, it will sooner or later escape them and run wild, and it will consume Earth itself in a leaping blaze of atomic force if it gets loose!"

THERON LEIGH was pale, his thin face haggard. "Couldn't we get up to the *Moonflower II* and go back to Earth in it, and leave Graff marooned here?" he asked hoarsely.

Lilene shook her dark head. "The man Graff is a cunning scientist. Sooner or later, with Tula's help, he would manage to build a rocket to take him and the Fire to Earth. No, we must prevent Graff from reaching the Fire

an eldritch green glow, stretched around them. Its towering walls of jagged black rock supported a rocky roof. The green glow that illuminated this cavern came from eerily shining fungi like huge mushroom growths, that grew upon the cavern floor and crowded the soft black soil as far as the eye could reach.

Madden discovered that he and Leigh had fallen upon one of the huge fungi. Their space-suits were smeared with the shining green fibers they had crushed beneath them. Madden turned. His companion had regained consciousness, and was gazing about with wild, dilated eyes.

"We're beneath the moon's surface," Madden told him. "Liline reached my mind as I was near death, up there, and told me to jump with you into the fissure. It's all that saved us—the air down here."

"Air, here beneath the moon's surface," Leigh whispered. "Then they were right, the astronomers who suggested that the moon's atmosphere long ago drained into a cavernous interior. Yet this place—incredible!"

They got to their feet, still weak and trembling, and divested themselves of the heavy space-suits. Each movement made their bodies aware of abnormal lightness. Madden gazed down the length of the great, green-glowing space but he could not see the end of the cavern.

"David, look!" Leigh suddenly shouted.

The older man was pointing wildly down the green-lit cavern, toward the haze that veiled its farther spaces.

Something there was moving—something black coming with flapping wings, flying through the green-lit spaces toward them.

"A bird?" whispered Theron Leigh, his thin face frozen as he stared.

"Too big," Madden exclaimed. "It

looks like an enormous flying lizard." Then he cried, "That's what it is! And it's seen us!"

He clawed out the heavy pistol in his jacket pocket, and wildly raised the weapon.

THE thing that was flying toward them down the vast, green-glowing moon cavern was a monstrosity. A gigantic black winged lizard, whose flapping, leathery pinions had a spread of forty feet, and from whose barrel-shaped body projected a long, snaky neck that ended in a turtle-like head. The flapping of its wings was like a threshing thunder in the eery stillness of the cavern.

Madden shot. The crack of the pistol was followed by a hissing cry of fear or rage from the winged monster. It curved sharply upward. Then a silver voice pealed down to them.

"David, don't shoot! It is I—Liline!"

"Liline!" cried Madden, staring wildly upward.

Liline—riding the back of the enormous flying lizard. He saw her, now, as the lizard curved fearfully away.

A slim, white-robed shape, clinging to the back of the scaled, winged monster. Dark hair flying back in the wind, her face a white blur as the frightened lizard sped past.

They heard her crying in silvery tones to the creature. And presently, with wings flapping, it curved around and came back down through the greenish gloom.

Cautiously, fearfully, the giant beast came to rest on short, thick legs, a hundred yards from them, crushing the shining fungi under its webbed feet. Liline's slim figure leaped from its back and came running lightly through the glowing growths toward them.

David Madden's heart pounded furi-

ously as the girl approached. She paused, and for a silent moment he gazed with wild, yearning excitement into her face.

Phantom moon-girl of his dreams, at last standing real and living before him! Her soft, childlike white face clear and beautiful now as it had been in the dreams, her dark eyes pulsing with strange emotion. She was garbed in a short white robe of silken stuff, belted by a jewelled girdle. Her black hair was tossed back from her broad, high forehead, her slender, youthfully rounded arms and legs bare.

Earth-man and moon-girl, they stood gazing breathlessly into each other's faces in the greenish glow of the shining fungi, oblivious to all else. And then they moved toward each other. And David Madden found Liline in his arms.

"It's not real," he said.

"David!" she whispered. Her dark eyes were misted pools as she looked up at him. "I've always loved you since first my mind came to you, years ago. Even though I thought that never should we two meet, who were separated, on different worlds."

"And though I thought that *you* were only a wraith of my dreams, I loved you, Liline—I always did, I always will."

Strange climax to those six years of haunted dreams—this meeting in the eldritch moon-cavern! The strangeness of it shook him, even as he held Liline warm and living in his arms.

Then both turned and approached Leigh. "You—David's friend—my friend," Liline said to the staring older man, a warm smile lighting her face.

"Why, I can understand you!" Leigh exclaimed incredulously. "Even though you're not speaking English, or any other language I know."

Madden suddenly realized the queer-ness of that. "Lilene, how is it that we

are able to understand you?"

"It is my mind that speaks to your mind, that you understand, David," the girl told him. "We of the Watchers always spoke thus to each other and to our beasts. We Watchers could always cast our minds afar, even to other worlds. That is how I was able to send my mind to you when your mind slept, David. But there is not time to explain now," she said rapidly. "You must come with me and prevent the man Graff from reaching the Fire!"

"But what is the Fire, Lilene?" Madden said, bewilderedly.

"We dare not delay here for explanations," Lilene said urgently. "We must return at once to the dead city where the man Graff plots with my sister Tula. But this much I will tell you—the Fire is a blaze of atomic energy in a space at the center of the moon—a mass of matter flaming through the ages by the conversion of its electrons into pure energy."

"Atomic fire?" David Madden exclaimed stunnedly.

"Good God!" cried Theron Leigh. "Atomic energy in the hands of Graff's country, of that mad dictator!"

"If the Fire is taken to Earth," said Lilene, "if Graff's people try to use it as a weapon, it will sooner or later escape them and run wild, and it will consume Earth itself in a leaping blaze of atomic force if it gets loose!"

Theron Leigh was pale, his thin face haggard. "Couldn't we get up to the *Moonflower II* and go back to Earth in it, and leave Graff marooned here?" he asked hoarsely.

Lilene shook her dark head. "The man Graff is a cunning scientist. Sooner or later, with Tula's help, he would manage to build a rocket to take him and the Fire to Earth. No, we must prevent Graff from reaching the Fire

at all. We must hurry, before he and Tula go to it!"

The girl turned and uttered a cry to the huge winged lizard that waited nearby. The lizard came slowly forward, its short, thick legs crushing down the green-glowing fungi as it crossed the cavern to their side. Its small red eyes were intently watching David and Leigh.

Liline laid a hand upon the creature's neck, and vaulted lightly to its back. "Mount with me!" she called urgently to the two men. "There is no time to lose!"

David forced himself to step toward the unearthly beast, though his hackles rose at its proximity. Gingerly, he leaped upward as Liline had done. The girl reached down and helped Theron Leigh climb up to their side. The lizard's enormous bulk twitched uneasily under them.

"To the city, Zah!" ordered the girl.

At once the great beast ran forward over the glowing fungi, and as it ran, its huge wings unfolded with a threshing whir. Those giant, scaly wings flapped vigorously, and the lizard flew straight down the length of the vast, green-glowing cavern.

David Madden felt a sense of nightmare unreality, as he and Leigh clung to the mighty creature's back and were borne on through one cavernous space after another. Always, they descended to lower levels.

They were penetrating down into the maze of caverns that honeycombed the moon, Madden realized. A dimly lighted world of green haze and grotesque, giant fungi. He glimpsed big, shelled creatures like great turtles browsing here and there on the fungi. And he saw *other flying lizards like Zah, and similar* but smaller creatures of a different species.

Liline's small hand clasping his wrist

seemed his only contact with reality. In the girl's lovely white face was a great fear. And that fear—fear of Jacob Graff's bold and terrible plan and what it might bring to a war-torn Earth—chilled David Madden too as they flew deeper and deeper into the somber caverns of the moon.

CHAPTER V

The Flame Within

LILINE leaned forward and called to the lizard over the rush of wind that beat against them.

"Faster, Zah! Faster!"

"God—all this—incredible!" Theron Leigh was muttering, his thin face pale and awe-stricken in the ghostly green glow of the cavern through which they were flying. "Life inside the moon—"

"Only two lives like yours," Liline reminded him. "Only Tula and I, the last two of the Watchers."

"Liline, where did your people come from?" David asked her. "Was the moon once colonized by Earthmen?"

"It was the other way about, David. It was the people of the moon, who long ages ago, colonized the earth."

"What?" he cried incredulously. "But that's impossible—"

"It is so. Long ages ago, when Earth was a steaming ball too hot for life the moon had cooled and was a green, blossoming world. On the moon life arose and evolved. Ancestors of both you and I were those ancient moon-people!"

"But as ages passed, the moon's surface withered. Its slighter gravitation could not hold the air and water on its surface. Only the air and water inside the cavernous interior still remained. *The moon-people had retreated into the* caverns, but in those sunless spaces, their numbers decreased. In desperation, their scientists secretly attempted

a forbidden experiment. They tried to kindle atomic energy that might make the caverns more habitable.

"That was the origin of the Fire, David! But when the Fire blazed up in the central hollow of the moon, they found it was a terrible and perilous thing. So the ancient moon-folk left the Fire alone. They decided to give up the attempt to make the moon-caverns more habitable, and to migrate to Earth, which by then had cooled somewhat. They built ships, in which they made the perilous voyage across the void to Earth.

"But they left here on the moon, in these caverns, the scientists who had kindled the Fire, and their families, as punishment for their forbidden experiment. They were to remain on the moon and guard the Fire, lest any rash or ambitious one try to bring it to Earth. The Watchers of the Fire abided by that sacred duty always, and their children after them, generation after generation while time endured.

"The moon-folk who migrated to Earth found Earth an inimical world. It was a time of great mountain-building, when land and sea-changes constantly destroyed their cities. Rapidly they retrogressed toward savagery, and soon they had no memory of their lunar origin. These savages were the ancestors of the present Earth races!

"But here inside the moon, the Watchers lived on, while their numbers steadily diminished. Around twenty years ago, there were but two of them left, the parents of Tula and myself. And when they died, Tula and I were left alone here.

"We two were lonely in this dead world, David! That is why I used the ancient mind-knowledge and sent my mind to Earth, night after night. When I contacted *your* mind, David, and realized your ambition to come here, I

tried to dissuade you, as was my duty as Watcher of the Fire.

"But my sister Tula, in her loneliness, sought to induce someone to come here—someone who would take her to Earth. She contacted the mind of the man Jacob Graff, who had been studying by scientific instruments the invisible force-rays that emanate from the Fire. And Tula, in her bitterness, told Graff by mental contact that if Graff came hither, she would give him some of the Fire!"

The lizard Zah was flying now down a slanting chasm of darkness in which few of the shining fungi grew. Ahead and below, the opening of a great dim-lighted space began to grow larger.

"We near the dead moon city," Liline whispered. "David, I am afraid. If we cannot stop Graff and Tula from taking the Fire to Earth—there will be a cosmic disaster —"

THERON LEIGH, clinging behind them on the scaled back of the rushing lizard, had a marble paleness on his ascetic face.

"Atomic fire—kindling on Earth," he muttered horrifiedly. "Getting loose—blazing up over the whole planet. Graff is mad to try to use such a thing as a war-weapon!"

"The Dictator," said Madden, "and his eternal cry of expansion is behind it all."

Now they were flying down out of the dark chasm into a vast, greenish-lit space. The mightiest cavern they had yet seen, lying deep here beneath the lunar crust.

"See—the city of my people!" Liline exclaimed. "The city they built long ago here in the caverns."

Madden's eyes widened at sight of the place. It was like the dead city of a weird dream.

The cavern was vast—two miles

across, hundreds of yards high. Illuminated eerily by the shining green fungi that grew in every unoccupied space, apparently planted there purposely to give light.

An unearthly city occupied almost the whole floor of the cavern. Thousands upon thousands of low, roofless buildings of black lunar rock, ranged geometrically in paved streets and squares.

No men or women moved in those streets of the age-old lunar city. No laughter or voices stirred the silence, no children played in the broad squares. In deathly silence, drained of life, lay this moon-metropolis of long ago, with its long streets and sacred buildings and gardens of shining, blooming fungi.

The great beast was planing down on rigid wings toward a central square, landing silently at its edge without any order.

Liline pointed to a squat, roofless structure of great size, facing them across the paved square.

"That is the home of Tula and myself," she whispered. "I left her plotting there with Graff, who has no suspicion that you have followed him to the moon."

Madden drew his gun. "You and Leigh wait here," he said.

But Liline refused. "I go with you, David! But you will not harm my sister? She is lonely, bitter, misled—"

"I'll try not to hurt her," Madden muttered.

Liline and Theron Leigh were close behind him as he cautiously skirted the great square and approached the squat, roofless tower.

Pistol gleaming in his hand, he leaped suddenly forward into the building. He stopped, staring tensely around.

He was in a large, shadowy hall. Heavy metal furniture, chairs and tables of strange design, stood about.

On the floor lay a space-suit and helmet that Madden instantly recognized.

"Graff's space-suit—one of the suits from our rocket!" he exclaimed. "But where are he and Tula?"

"I left them here," Liline whispered, her dark eyes wide. Then a stabbing terror leaped into her white face.

She sprang toward a door, and flung it open. Beyond was a small closet. Upon a row of hooks hung a score of strange, cowed cloak-like garments of dull-gleaming metal fabric. Small folding *wings* were attached to the shoulders.

Two of the hooks were empty.

"David!" cried the girl, her face terrified. "They've gone already to the Fire—Tula and Graff! These are the protective suits in which alone it is possible to approach the Fire—and two of the suits are gone!"

"Then we've got to follow them! Before Graff can secure any of the Fire."

Dread, a shadowing, shrinking horror, came into Liline's clear white face. He saw her slim body shiver. "It is deadly dangerous, even wearing the protective robes," she whispered. "But yes, David—we follow!"

She showed them how the metallic cloaks were worn, with their fabric covering the whole body, the cowl coming down over the head, pierced by two transparent, quartz-like eyepieces. Long gloves and loose socks of the same fabric completed the outfit. They had to discard their space-suits, as Graff had done, to don them.

David, arrayed in the monk-like garment, found that the folding wings were attached to his lower arms so that by spreading his arms he could unfold and move the wings.

"What are the wings for, Liline?" he asked puzzledly.

"We must fly partly, to approach the Fire," she cried. "You will see—"

THEY hastened out, a trio of weird apparitions in the cowed robes, to where the great lizard waited.

They mounted Zah's back. Liline cried a muffled order.

"To the Chamber of the Fire, Zah!"

The lizard looked back uneasily at her, with small red eyes. Reluctantly, Zah ran and rose and flew along the cavern.

Again, they flew on deeper into the maze of chasms and green-glowing caves that honeycombed the moon. Depth beneath depth, a labyrinthian immensity that made David Madden's head reel.

Liline was crying to him, "Keep your robe close around you when we near the Fire, or you will die!"

Ever more slowly and reluctantly, Zah flew deeper into the caverns and crevices, great wings flapping in the green gloom.

"Zah fears the Fire—he will not enter the Chamber of the Fire itself," Liline was saying. "We near it now."

They were flying down along a slanting natural tunnel. At its far end gleamed light—not the greenish fungiglow, but a growing white radiance like that of the noonday sun.

Zah, flying ever more slowly, descended and landed on the floor of the tunnel without order. The lizard craned its scaly neck back toward its young mistress, uttering a pleading sound.

"Zah will go no further!" Liline exclaimed, leaping lightly from the lizard's back. "We must go on foot—come, David!"

They started along the tunnel, climbing over masses of rock by a path that Liline seemed to know well.

The tunnel curved to the left, slanted downward further. The white radiance that came around its curve from ahead grew stronger.

Madden's heart was pounding, as they clambered on around the curve of the tunnel. Then after a few moments of further progress, he recoiled with a hoarse cry that was echoed by Theron Leigh.

"Good God!" he heard Leigh choking. "That—"

"It is the Fire that my people kindled long ago!" Liline cried.

Both men were stunned. And Madden felt blinded by the terrific radiance that now bathed them. They stood at the end of the tunnel. It debouched into space—a colossal spherical empty space, miles across, here at the heart of the moon.

And poised at the center of this inner space, like a little sun hanging at the very heart of the moon, a blazing orb of white sunlike flame pulsed like a prisoned star.

It *was* a star here at the heart of the moon—a small but starlike mass of matter flaming unceasingly through the ages with slow-consuming atomic energy. A star of fire—moonfire that had been guarded by the Watchers for countless millennia.

CHAPTER VI

Terror Unloosed

LILINE cried out and pointed with her cloaked arm toward two far-away specks that stood out black against the Fire.

"See, there go Graff and my sister!" she cried. "We must overtake them before they reach the Fire. Jump outward with me!"

"Jump?" said Madden, appalled. "But we'll fall—"

"No!" the moon-girl assured him. "There is almost no gravitation here at the heart of the moon. We will float, and we can fly with our wings—"

As she spoke, Liline launched herself out from the brink of the tunnel into the vast space.

David Madden tensed and plunged out after her. To his amazement, there was no sensation of falling. He floated forward to her side, as though upbuoyed by a dense sea. Theron Leigh reached them a moment later, the little scientist's eyes dilated behind his quartz lenses.

"Use your wings as I do!" Liline called to them. "Hurry!"

The girl was moving her arms in a steady, beating motion. The unfolded wings of metal fabric attached to them threshed the air in a regular rhythm, and she glided forward through the abyss, toward the distant Fire.

Madden and Leigh followed her example. Their clumsy wing-movements sent them plunging forward in awkward progress. The three flew steadily out from the wall of the great moonheart cavern—on toward the sun-like Fire poised at its center.

"The Fire floats at the very center of this space—the moon's center of gravitation," Liline was calling to him. "It is well that it is so, for if that atomic flame touched the surrounding mass of the moon, all this world would kindle to a devouring blaze."

"Liline!" cried Theron Leigh's muffled voice hoarsely, the little scientist pointing wildly ahead. "Those two are not going toward the Fire — they're coming *back* from it!"

Madden's heart skipped a beat as he looked ahead and saw. It was the truth. The two specks ahead were growing larger.

Those two specks became two individual beings, cloaked in metal-fabric robes like their own, flying toward them with wings flapping regularly. And at the belt of one there hung a small, tight-covered crucible of the same protective metal as the robes.

"They have secured some of the Fire!" Liline's voice had anguish in it. "See, the man Graff carries it at his waist—we are too late—"

"They've seen us — they're coming toward us!" Leigh shouted wildly.

The two winged beings approaching had changed course slightly and now were flying straight toward them at increased speed.

"We're not too late to kill Graff and keep him from taking that Fire away from here!" Madden said grimly, tugging his pistol from the belt of his metal robe.

He aimed at the taller, leaner of the two flying figures, which he recognized as Graff's gaunt form. He shot, twice.

Graff was shooting back at him! But neither man, unaccustomed as they were to this weird floating flight in emptiness, could aim accurately.

Graff's companion — Liline's sister, Tula — darted like a striking hawk through the radiance toward Madden. The American heard Liline cry in frenzy of fear to her sister.

"No, Tula no—"

She plunged herself in falcon flight to intercept her sister. But Tula, with a lightning curve and swoop, evaded her and seized Madden from behind. Madden struggled furiously, trying to squirm around and strike with his gun-barrel at the moon-girl. Even in this perilous moment, he couldn't forget that his antagonist was Liline's sister.

But he was at a terrible disadvantage in this floating fight. Tula, who could move with skillful sureness, wrenched the gun from his hand. It went spinning away through the air.

Madden had squirmed around, and was now face to face with the moon-girl. Through the eyepieces of the other's helmet he glimpsed Tula's face—lovely, strongly resembling Liline's, but contorted now with purpose. Her lips were

drawn back, her eyes were dark pits of fire.

"Stop resisting, Madden—or I will kill you and Leigh now!" yelled a thick, guttural voice.

IT was Jacob Graff's voice. Graff had reached them, was floating beside them, covering them all now with his pistol from a range so short that now he could not miss.

Madden relaxed his struggles. He, and Liline and Theron Leigh floated there in mid-air in the blazing radiance of the distant Fire, facing Graff and Tula. Tula suddenly released Madden and darted to Graff's side.

Graff's eyes gleamed triumphantly through his quartz lenses. His muffled voice came thick with satisfaction.

"So! You followed me to the moon in your older rocket! Foolish, Madden—it means your death. You and Leigh are going to die before I go back to Earth with the Fire."

Graff tapped the little covered crucible that hung at his waist. "I have the Fire, yes! Only a little of it—but that little will be enough for the scientists of my country to use as the basis of new weapons that will blast our enemies from existence! No one will stop us now!"

"You're mad, Graff!" Madden cried. "That Fire will devastate Earth if you take it there—your country as well as the enemy countries!"

Graff chuckled. "Oh, no—we'll keep it under safe control, never fear. I, the new Prometheus who stole this Fire, will see that it doesn't get loose."

Liline's silver voice flung to her sister in wild, passionate appeal.

"Tula, are you going to help that evil one in his scheme? Remember the duty that was laid on our families ages and ages ago—"

Tula's voice came slowly, trembling.

"I am weary of being a Watcher on this dead and empty world, Liline. I told you that—and why should I stay here and die alone and lonely, when I could be powerful and happy on Earth? *You* can stay here if you wish, Liline, but this man and I go now to take the Fire to Earth."

Tula's voice swelled. "I shall be mistress of all Earth, do you hear? Graff has promised me that, for getting him the Fire. His people will conquer all Earth with the Fire, and I will help him rule over them and all the conquered nations!"

"*He* rule?" Madden rasped. "He is nothing but the miserable slave of a crazed tyrant. And the tyrant rules alone, friendless, jealous of all. He has tricked you!"

"Quiet, you fool!" Graff roared. "When you mention the Master's name—"

"Tell me there is no truth in what he says," said Tula suddenly. Her eyes were alive, her gaze unsteady as she looked searchingly at Graff. "I have waited so long. Will I not be mistress of the Earth?"

"Mistress?" Graff retorted contemptuously. His rage had overpowered him. "Do you think my people would let a half-savage rule them — and a mere *woman* at that? Women are animals to bear children! We have a Master—the greatest in history. *He* will lead us—with the Fire!"

Tula seemed stunned. David Madden saw her looking at Graff as though unable to understand. "Then you have tricked me—played upon my ambitions and my loneliness—" Tula gasped.

And suddenly, with a piercing scream, Tula launched herself with flailing wings toward the spy.

Jacob Graff shot. The bullet seemed to check Tula in mid-flight. She slowed and floated, her body limp.

peaks and ridges of Bulliadus crater. And at their base lay something that flashed and glittered in the sun—

"There's the *Moonflower II*!" David yelled.

The whole lunar plain was rocking and buckling wildly under them as in great, flying leaps they ran toward the rocket.

From distant peaks of craters, from cracks and fissures in the plain, white fire was creeping out, blazing with a radiance that paled even the sunlight.

"The Fire reaches the surface!" Liline sobbed.

"One more leap will make it!"

They caromed against the wall of the rocket. With stiffened hands, Madden tore open the air-lock door. When they tumbled inside, he plunged straight toward the controls.

There was no time to strap themselves into the recoil-harnesses. The Fire was already bursting from beneath in a score of places across the lunar plain.

Madden's fingers smashed the firing-keys down. There was a shock that seemed to rive his body—then darkness.

When he became conscious again, his first thought was for Liline. The moon-girl revived rapidly, and Theron Leigh was already stumbling to his feet, toward a window.

"My God—look back there!" Leigh cried to them.

Madden and Liline reached the sci-

entist's side. They peered, appalled.

The rocket was flying steadily through space toward the great shield of Earth. But behind them, there was now no silver, gracious moon in the heavens.

Instead there flamed a *second sun*! A small, blazing white star whose radiance drenched the rocket and the distant earth, in a flaming flood.

"The moon—my people's ancient world—gone forever now!" sobbed Liline. "Eaten by the Fire that will blaze there now for eons."

Theron Leigh was speaking as if in a dream that he saw materializing. "The atmospheric blanket of Earth will filter out the harmful radiation. But this new little second sun will make Earth a warmer place. It will melt the polar ice, I think—make all the Arctic and Antarctic lands habitable."

Suddenly Leigh's haggard face lit. "And those new habitable lands can relieve the pressure of expanding populations. With new lands to go to, the crowded peoples will listen no longer. The Dictator's reign is ending!" he cried. "Ending in the glorious blaze of light from the past—and the hand that engineered it was his own!"

But David Madden was not listening, now. His arm around the moon-girl, he had turned from the window.

"Don't look back, Liline," he was saying. "Look ahead, to Earth, your new home—*our* home."



RIDDLES OF SCIENCE

What Killed the Dinosaurs?



MILLIONS OF YEARS BEFORE MAN, THE EARTH WAS RULED BY GIANT REPTILES. THEN, APPARENTLY VERY SUDDENLY, THE DINOSAUR BECAME EXTINCT. WHAT HAPPENED TO THESE DAWN-WORLD GIANTS?



ONE THEORY IS THAT AN ICE AGE, OF WHICH SCIENCE SAYS THERE WERE FIVE, DESCENDED ON THIS TROPIC WORLD AND FROZE ALL REPTILE LIFE.

THE LATEST THEORY, HOWEVER, IS THAT A HEAT WAVE KILLED THEM OFF. RECENT EXPERIMENTS SHOW THAT EVEN DESERT REPTILES DIE QUICKLY IN HEAT A HUMAN BEING CAN STAND WITH EASE.

AGES ago, during the Carboniferous period, the Earth was ruled by the Dinosaurs, giant creatures that would strike terror into the hearts of any race today. They were very numerous and very ferocious. Some were so huge that two brains were necessary to control their bodies. And even at death, their nervous system was so crude it took minutes for the message to reach the brain. Considering this, it is amazing to realize that they vanished almost overnight. What really killed them? Science isn't sure.



Hok drew the bowstring far back, then let it go

Hok

Hok the Mighty engages in a last grim battle against the fearsome Gnorrls, and finds brain, and his new bow, very superior weapons indeed

THEY all died long ago, at the hands of our ancient ancestors in the bitterest and most final war of all human history and prehistory, but we still wonder at their grotesque remains—the Neanderthal Men that were not men, but somehow a different and rival race. Fierce and cunning and horrific, they had to be exterminated if our fathers would live in the Europe they found thirty thousand years ago.

The Neanderthaler was gross and shambling and hideous, prototype of ogre and troll; but he fashioned and used tools with those great meaty hands of his, built fires, cooked meat, joined with his fellows in great bands for war and hunting. We know that he worshipped, for he buried his dead with provisions and weapons for use in an afterlife. We do not think he had art, but we cannot be sure. And no man can say into what pattern fell his thoughts, for they were not such thoughts as we think.

His skull was primitive, thick, almost browless; but what it lacked at the front it made up in a great swelling occiput, and its whole tissue approximated in size and weight many modern brains. What would be his ethics, impulses, his likes and dislikes? The only surety is that they differed from our own—were so different that when our true forefathers, the tall handsome hunters of the Upper Stone Age, met such hairy ogres, they could not make treaties or agreements. It was war, and to the death.

It was a long war and desperate. Not only was there close and awful combat, to the last drop of blood and the last ounce of strength; there was



Draws the Bow

By MANLY WADE WELLMAN

brilliant thought and planning and courage, and inventions mothered by sternest necessity—inventions that seem simple enough to us now, but which then changed the fate of whole continents and epochs. We wonder about such matters, cannot help wondering, imagining, making mind-pictures of how things may have fallen out in that grim youth of the world.

And so—another adventure of Hok the Mighty, chief of cave-dwelling hunters, as he strove against the abominable beast-folk he called Gnorrls.

—M. W. W.



"**H**AI!" cried Hok, for the love of battle was strong in his breast. Now he lifted the first of his javelins and, scarcely aiming it, he sent it in a short arc to the chest of the closest Gnorrl. Hok was shouting now, and the battle cries of his tribe rang from his lips.

He had come on them accidentally, and it had been contrary to his nature not to offer them battle, though they outnumbered a hundred to his one. His legs planted apart, he sent the second javelin spinning through the air. "Re-

member Hok!" he called.

They were Gnorrls, right enough—hairy, burly, abhorrent—but they were not acting like Gnorrls. Instead of charging in a howling mass, they formed into a skirmish line and closed in, twenty or so, very cannily.

Noticing this strange behavior, Hok grew wary, and even in battle, his eyes became thoughtful. He had left only his stone axe with its span-wide edge, his poniard as sharp as a sting, slung in the girdle that held up his clout.

At the very first moment he drew away from them. Clean-limbed, long-legged, deep-chested, his tawny hair flowing behind him, he was a famous runner. He was less bulky than they, and he towered above their tallest by the height of his proud head. His moccasined feet touched the snowy ground like a s'g's hoofs, and as he ran, his face grimaced in disgust.

Anyway, he would soon be clear of their swiftest—those bandy legs and

heavy bones could not begin to match his hunter's lope.* Even though they had surprised him as he roamed among the crusted drifts near to their stamping grounds, they could never catch Hok, strongest and swiftest of the true men.

But, even as he drew far ahead, his blue eyes snapped with the cold fire of desperation. For he was running down a long, gentle slope, tufted with leafless thickets above the snow crust, and at the bottom was a winter river—but not frozen! Here the channel was narrow, and the current raced too rapidly even for the ice-spirit to clutch. Before many breaths' space he would be there—would have to swim that blood-stopping water—no, that would be impossible!

Because the Gnorrls lumbering behind him were not pursuing alone. Along the river-bank to right and left other parties appeared, closing in. He could not break either way, and if he sprang into the water their hurled stones would smash out his brains before he could flounder across. Hok was trapped!

Knowing that, he turned and faced the beast-men as they converged upon him. The fear of the Gnorrl still touched his heart, as from his first boyhood encounter with them; but not they nor smarter creatures could have guessed it from his challenging glare, the flash of teeth in his beard, the upward whirl of the war-axe in his great cobble of a fist. So formidable was his coming to bay that the three bands of Gnorrls wavered, snarling and jibbering, even as they came together and formed a half-circle to trap him with his back to the racing torrent.

"Come on and fight, Gnorrls!" Hok roared at them, and saved the rest of

his breath for the last and grimmest struggle that he thought was upon him.

But at that instant something buzzed through the air from behind him, like a huge wasp, and the centermost Gnorrl of the half-circle suddenly stiffened, dropped his club and fell limply on his back. The shaft of a javelin sprouted from the thing's gross, shaggy chest. And the others, who had wavered, now stopped in their tracks and burst into a chorus of dismayed whines and wails.

Hok flexed his muscles—he was for leaping straight at the line, smashing his way through. But again there was diversion from across the river to his rear.

A voice made itself heard, a human voice that roared in gutturals—it seemed to be imitating the Gnorrl language in mocking defiance. Hok had insulted Gnorrls like that in the past . . . but the half-human monsters were more dismayed by the voice than by the spearcast. They began to stumble backward, breaking their formation. More shouting at them from over the river, and they actually turned and fled. Hok leaned upon his axe, and was grateful to whoever had so strangely rescued him.

"Hai, you chief of men!" bawled that same rescuer. "You are safe now! Walk upstream a few paces—there is a broadening, and ice enough to cross! Come to me!"

Hok had time and safety now, he turned and looked.

THREE ten-tens* of paces away, with the river and much other width between him and Hok, stood the figure of a tall, lean man in a muffling mantle of bison-pelt. Hok scowled in mystification. Three ten-tens—had the stranger thrown a javelin so far and so

* Comparison of skeletons shows that the Neanderthal man was heavy and clumsy, and certainly no speedy runner. —Ed.

* With Hok's people, as with many more recent savages, the term "ten-ten" signified a hundred.—Ed.

straight? Even so shortly after deadly peril, Hok was able to feel chagrin that he himself could not do much better, if at all. He salvaged the weapon that had pierced the now dead Gnorrl. Then, obeying the words and gestures of the man beyond the river, he trotted to where the ice would bear his weight and bring him across.

The other came to meet him—strangely roan-red of hair, with the beard plucked clean from his square, shallow jaw in token of bachelorhood. Hok met the gaze of two eyes, brilliant but close-set, that seemed to sneer. But Hok was not one to forget his manners.

"Who shall Hok thank for standing his friend against those Gnorrls?" he asked formally.

"I am Romm, the free hunter, wandering to see new and pleasant countries," was the airy reply. "Your name is Hok? Are you not the chief of that tribe that lives to southward along this same river, the man whom the hairy folk the Gnorrls, as you name them—call the Slayer From Afar?"

Hok's jaw must have dropped in wonder, for the stranger laughed without particular abashment. "Oh, I know the language of the creatures," he elaborated. "I have long observed them, you might say. Come, Hok, you stand my debtor for saving your life. Will you not invite me to visit your camp and tribe?"

It was baldly requested, but again Hok did the polite thing. "Come," he said, and turned downstream along the river. Romm followed, and the two began to travel toward Hok's country.

On the way, Romm did most of the talking—an incessant recounting of the wonders he had seen in many countries to south and east, of his love-successes with stranger women, his cleverness in hunting and battle. Yes, for all his verbosity, he remained a figure of mystery,

not easy for Hok to estimate or classify.

"You have learned the language of the Gnorrls," Hok found time to remind him. "When you yelled at them across the river, was it to frighten them?"

"In a way—yes," grinned Romm. "At any rate, they left you alone."

"It was as though you had given them an order," pursued Hok.

"In a way—yes," repeated Romm, with more of his characteristic mockery. "An order—it seemed like that. But you thank me too much, Hok. Perhaps you are more useful to me if you remain alive."

Hok opined weightily that any good man was more useful when alive, and Romm laughed and laughed. One thing Hok did not mention about the rescue, and when they camped that night in a little cedar-rimmed hollow, Romm himself brought it up.

"How did you like my javelin-casting?" he inquired.

"It was well done," responded Hok, who found it harder and harder to maintain his gratitude toward this rescuer of his.

"Well done!" echoed Romm. "Can you say no more? But I can cast a javelin farther than any living man."

Hok said nothing. It had been his private opinion for years that he, himself, was the best javelin-thrower in the world.

ON the next day, shortly after noon-tide, they reached Hok's stronghold. Hok led the way in, by a narrow runway between high bluff and swift water, and Romm followed him to the lip of a lune-shaped beach made by a backward curve of the bluffs. The only other way out was a ladderlike trail that slanted to the top of the high ground.

From the clump of conical huts, made of woven willows and clay daub, came

Hok's people to greet their chief and stare at his guest—thirty huge-limbed hunters, with their women and children, some ninety or a hundred in all. Some were tawny like Hok, some were brunettes from further south who had gathered under the mighty chieftain for leadership and protection; but none of them had ever seen a roan-head like Romm, who rather gloried in the attention he drew.

"This is Romm," Hok introduced him. "He saved me from some Gnorrls—he speaks their tongue, and may help us fight them."

Romm replied with another of his ready chuckles that did not invite anyone to share his mirth. "What if I do not care to fight Gnorrls?" he asked, for all to hear. "Men of the riverside, does this big chief of yours waste your strength in useless war?"

In the forefront of a knot of hunters stood Zhik, the brother of Hok, two years his junior and a sub-chief of the clan. Like Hok in color and features, he was only a finger's breadth smaller all around. He took a slouching step forward, scowling.

Romm did not appear to notice. His bright, narrow-set eyes were questing elsewhere among the onlookers. "You have handsome women here, Hok," said he.

Hok followed Romm's gaze, and saw that it had found a comely woman with black hair and golden-tanned skin. She had come from Hok's own residence, the grotto in the bluff behind and above the huts. Now she turned her back, in modest dislike of Romm's searching regard. Hok's nostrils twitched and an icy light kindled in his own eyes. "That is Oloana, my wife," he warned Romm bleakly.

"Mmmmm—yes." Romm was not abashed. "Women are won by fighting of their men, is that not so? If some-

one fought and beat you, Hok—"

Zhik growled and spat in the sand, and made a leaping stride that brought him within reach of Romm. "Hok, I do not like this stranger," he snapped. His hand darted to his hip, swift as a conjuror's and came away with a beautifully ground dagger of deer-horn. "Let me slit open his narrow belly and see how his blood discolors the ground."

"I am your guest, Hok—in your protection," said Romm hastily, and Hok thrust Zhik back with the heel of a hand against his chest.

"It cannot be, Zhik," he said; then saw that Romm, for all his claim of hospitality rights, had drawn from his own girdle a little hand-axe with a narrow, chisel-like blade—a weapon that could drive to the brain with a single flick of the wrist. Hok's other big hand shot out like the paw of a cat and struck Romm's wrist, so that the axe was knocked to earth.

"No fighting," commanded Hok. "Romm, it is best that you make no enemies here. My men are skilled with weapons."

"With the javelin?" asked Romm, who seemed to have conquered his momentary nervousness. "They do well with that, I suppose—and you, of course, surpass them all?"

Hok nodded.

"I, too, am thought skillful at javelin," Romm informed the gathering. "It would be sport, I think, for Hok and me to cast javelins against each other to see who made the farthest throw—two out of three trials."

Eager for diversion, the tribesmen applauded. Hok gazed at his guest, so ready with challenges and evidently so confident of victory. Could he, Hok, afford to take up such a defiance? Nay, could he afford to refuse? . . .

"Let javelins be brought," he directed some halfgrown boys. "We will go to

the meadow beyond here, and Romm and I will match our skill."

He led the way up the slanting path that mounted the bluff.

CHAPTER II

The Javelin-Throwing

THE clan gathered quickly — men who happened not to be hunting, women who could drop their work, children in winter garments of rabbit-fur and soft deerskin. At Hok's direction, two of the biggest boys stepped off a hundred paces in the snow, planted a branch of cedar, then a second hundred paces and a second branch, and finally a third.

"A fourth ten-ten mark, too," requested Romm, who was squinting along the shaft of a javelin. Hok stared, and Romm snickered. "Perhaps three tens of paces is your limit, Hok, but I can do better." *

Hok raised his great voice, so that the distant lads heard him. "Pace off another ten-ten!" he yelled, and all who watched murmured together in wonder. Who had ever cast a javelin four tens of paces?

"Will you try first?" said Hok courteously to his rival, who grinned in some secret mockery and chose one of the javelins scattered upon the snow. He threw off his bison-wool robe, caught the shaft by its balance, took his stance carefully, and threw it. High in the air twinkled the shaft, a dazzling streak against the cloudless blue of the sky. It climbed a great slope of space, skimmed smoothly into its downward path, and drove into the snow well past the middle of the third hundred paces.

A watching lad quickly stepped off

the distance, shouted the result to a nearer comrade, who passed it on to the gathered watchers. Two ten-tens and sixty-eight paces—a more than adequate throw. But Hok had done as well in the days before he had come to his present growth and strength. Dropping his lion's skin, he stood forth in the crisp bright air with only a clout and high moccasins. Disdaining to choose among the javelins, he caught up the nearest, set himself with left foot forward and left hand lifted as though to point. A quick flexing of all his sinews, a driving of his strength in behind the launched weapon, and it went singing like a locust along the trail of Romm's attempt.

Every eye followed the course of the missile, and the younger men chorused a cheer as they saw it rise to a greater height than Romm's had attained. The javelin angled downward and into the snow—beyond the first throw of Romm.

Jubilation on the part of all the very prejudiced watchers as the boy paced the distance and hooted it back—two hundred and eighty-nine paces. Only Hok was silent, reserved. Romm laughed with the others, but in his secret manner that was becoming such an irritation.

"You have beaten me—once," he acknowledged cheerfully. "I thought to allow you that much. But two more trials remain."

He fumbled in a belt-bag and produced a piece of buckskin cord, as long as his arm and very thin, round and even. Then he selected another javelin and, while Hok and the others gazed in mystification, began a strange activity. He hitched one end of the cord around the javelin, just rearward of the balance, and then wound the rest in tight, even spirals, around and around, until only the other end of buckskin remained clear. This part was split, and into the

* These may seem great distances for javelin-throwing; but the strength and constant practice of the cave men must be considered.—Ed.

opening Romm hooked his thumb.

"This is a trick of my own devising," he chuckled, and grasped the balance of the weapon. Again he took his stance, drew back his arm and launched the javelin. At the same moment, his thumb jerked strongly upon the cord.

THAT violent pull unwound the wrapping, almost instantaneously. It spun the javelin as a fire-drill is spun between the palms. As the shaft took the air, it yelped rather than sang—tore up and up and up into the sky, as though it would never come down. Hok's eyes, following that amazing journey, widened apprehensively . . . and then the boy was reporting that the distance was three ten-tens and thirty-two paces.*

The murmur of the watchers became a hubbub. Nobody had ever seen such a throw, nor had they heard of one, even in the legends of their grandsires. Hok made himself stand and speak calmly, but he breathed deeply as he put out a hand and fingered the string that still dangled from Romm's thumb.

"There is great strength in that buckskin," he pronounced, and Romm laughed yet again.

"You did not think that such a cast was possible," he taunted Hok. "Do you give up the trial, big man, or will you continue and be beaten?"

All pricked up their ears. Nobody had ever dared speak thus to Hok. Out of the group of young hunters that stood nearest moved Zhik as before, and he sauntered dangerously, like a panther on the hunt. His hand clinched on the hilt of his dagger.

"Hok," he almost wheedled, "let me

cut the throat of this ill-mannered stranger."

Romm stooped swiftly for yet another javelin, but Hok lifted his broad hand. "He is my guest, Zhik." And, to Romm, "I will throw a second time. Watch."

He took up his shaft, studied it and the ground and the far upward jut of that string-spined throw of his rival. In his heart he knew that such a feat was beyond his own simple skill. Then a plan came to suggest itself, and he almost smiled in his beard, but forebore. He placed himself, gathered his strength, and threw. Compared to Romm's peerless attempt, his javelin seemed barely to rise above treetop height. And it came down almost exactly between the marks made by his own first attempt and Romm's.

"Two ten-tens and seventy-eight!" called out the marker from afar. There was aghast silence, broken only by Romm's laugh.

"Your second is less than your first," he said to Hok, and to the watchers: "Ho, people! This chief of yours has a weak arm and a dim eye. Would you not rather follow a true javelin-master like me?"

It was offered as a joke, but one or two received the suggestion seriously. There were men who were jealous of Hok. They smiled back at Romm, and whispered together. Zhik glared that way, and once again he half-drew his dagger.

Hok watched Romm pick up and wind his third javelin. The fellow's hope seemed suddenly clear to him. He would beat Hok in this contest, but make capital of it slowly. He would gather some admirers—malcontents and young hero-worshippers—and wait his time. Some day, when Hok was absent or ill, he might try to seize power. . . . Romm was gazing again at the group

* Anyone who has even pegged a top with a cord will understand the method of Romm's casting; a spinning spear, like a spinning bullet or football, will go farther and harder than a floating one.—Ed.

of women. His close-set eyes frankly admired Oloana, who turned away as before. Then Romm spoke to Hok:

"Your throws are beneath my best striving," he sneered, and with careless ease spun away his javelin. High it went, but not so high as before, and it fell to drill itself into the snow just on the near side of the third marker-branch. "Two ten-tens and ninety-eight!" cried the marker.

Romm shrugged, thrust his throwing cord into his bag, and turned his back as though scorning to see the final attempt of his rival. And now, for the first time, Hok showed care in choosing a javelin.

HE picked up and discarded three before he found one that pleased him—a straight and flawless shaft, a light, narrow head. He tried its balance and spring carefully. Then he planted his feet with precision, poised himself twice and finally, with all the strength and skill of his huge wise body, made his final cast.

Away hummed the javelin, and in its wake rose the roar of Hok's people. For it was such a cast as Hok had never made, as no other man could have made without such a device as Romm possessed. It was coming down now—even with Romm's third try—no, beyond! And the marker was pacing off, and shouting his result:

"Three ten-tens and nine paces!"

The winter air seemed to smoke and quiver with the prolonged howling of Hok's people. Even those who had been ready to side with Romm were dancing and whooping. It was long moments before the din abated and Hok could hear the harsh accusation of Romm, voiced through set teeth:

"It was not fair! You tricked me—made your second throw weak, so that I would not do my best the third time!"

But it was Hok's turn to exult. His big white teeth glittered in the sun-brightness of his beard. "Call it a trick, if you will. I matched my heart's trickery against the trickery of your buckskin thong. Twice out of three times I outthrew you."

"It was false! Cowardly!" Romm raged. His half-built fabric of sedition against Hok was crumbled to nothing, and he lost all caution and control. "I will—"

His fist flew out, and Hok twitched up a great shoulder to ward the blow from his jaw. His smile grew broader.

"You have struck at me," he said, as silence fell all around them. "I owe you no further debt of hospitality or protection. And if this is to be a contest of strength—"

With the swiftness of a lashing snake, he hurled his own boulder-like fist into the center of Romm's angry visage, and the trickster somersaulted twice backward before he lay still and stunned, his eyes closed and blood on his nose and mouth.

The silence remained. Hok stooped for Romm's bison-wool mantle, then walked to the side of his motionless adversary and spread it over him. He lifted Romm's javelins and broke them, one and then the other, across his lifted knee, and dropped the pieces on the snow-crust. Finally he rummaged in Romm's belt-bag and secured the buckskin thong whereby such amazing feats of javelin-throwing had been achieved.

"And now," he addressed the onlookers, "return to your work or other occupation. When this man awakens, he should know that he is not to see us any more. But if he tries to come back among us, let the children throw stones at him."

However, Romm made no such attempt. Later in the day, as Zhik subsequently reported to Hok, Zhik watched

him rise and tramp glumly away. Zhik followed Romm stealthily, for the brother of Hok was not one to give up the project of killing someone he disliked; he wanted the roan-head to get well out of the hunting lands and therefore away from any lingering impulse in Hok to spare him. Later Zhik would overtake the fellow, goad him into drawing axe or dagger, and fight it out to a grim finish.

But just at sunset, the thing became impracticable. For Zhik, rounding a thicket, saw a half dozen Gnorrls come trotting from the north to meet Romm. And they did not attack him—they hailed him with gestures of clumsy respect, they came close and fell on their faces before him, even as scouts of the tribe had seen them grovel before the red sun at rising. Finally they went away together—Romm and the Gnorrls—as friends and allies.

All this Zhik reported to Hok, who digested and rationalized it:

"Romm, then, has joined the beast-men. He has become their chief, and they worship him; perhaps his red hair makes them think he is from the sun." Hok spat. "A man joining the Gnorrls! It is more disgusting than Gnorrls alone."

"And he saved your life only to discredit you before the men of our camp," contributed Zhik. "Thus we others would be more easily beaten. I still want to come within knife-stroke of him."

"Such a chance may still come," smiled Hok. "Romm plays some long game with us—something beyond killing us for the sake of his Gnorrl friends. But so far he has found the playing rough. In time to come it may be rougher still."

As usual, he spoke with chieftainly confidence; but his big, brave heart was full of wonder and meditation.

CHAPTER III

The New Weapon

ON the third day after his contest with Romm, Hok sat by a small tallow-lamp * in the rear of his cave, the place where he retired for meditation and experimentation. The wise Oloana, knowing her husband's preoccupied mood so well, warned all to leave him alone.

He was examining the cord he had taken from Romm's belt-bag, twisting and twining and pulling it. Earlier he had tried to use it as Romm had, with very indifferent success—it would take long practice to learn the art. But the principle of shaft-spinning was manifest to him, and he determined to achieve or improve upon it.

"What that boastful wanderer could do, Hok can do better," he told himself with utmost confidence. "He was not so strong as I, but the cord strengthened him. It is like the throwing stick of the Gnorrls, who can send a stone farther than it can be thrown by hand—they split a stick, push the stone in, and whirl it as though with an arm twice lengthened." **

The thought of a stick as a throwing device impelled him to poke among the weapon-materials in a nearby corner. He fetched forth a long, straight piece of hickory that he had cut months ago to make a javelin shaft. It was nearly as long as himself, two fingers thick at the mid-point where the balance would be, and the two ends tapered somewhat by long and judicious scraping with rough flint. He tested it by careful bend-

* Such lamps, made of soapstone, are often found among Palaeolithic remains.—Ed.

** Neanderthal man certainly used such a device, as examination of his flint tools shows, sometimes even shaping a stone to fit in a cleft stick for throwing. See Osborn, *Men of the Old Stone Age*.—Ed.

ing—it had springy strength, and in the hands of a Gnorrl it would make an ideal stick for stone-throwing. He looked from it to the cord, and back again.

"Romm uses a cord, the Gnorrls use wood, to make their casts long," he muttered. "I, who wish to outdo them both, might use wood and cord as well. How?"

He tied a noose in the cord and drew it tight over one end of the shaft. Lodging the butt of the hickory in a crack of the rocky floor, he pulled at the cord. The tough wood bent slowly and unwillingly. Hok pondered, then nodded to himself. A stone—yes, or a javelin—fastened somehow to this cord, would be whipped strongly forward at will. He carried the device outdoors and to the meadow behind the settlement where, unobserved, he could test and judge.

Driving him on with his experiments was the submerged, only half-conscious fear of what Zhik had told him—of Romm and the Gnorrls. Hok hardly knew he was looking for a weapon. He only knew he was working on something.

His experiments with stones and wooden splinters were clumsy, but they gave him something to think about. When, after repeated tuggings, he broke Romm's cord, he returned to his cave for another, longer and thicker. This he knotted to one end of the stick, pulling at it in various manners.

The power was there, he knew, but he was still at a loss as to how it could be used. Finally, partially by chance and partially by half-formed inspiration, he drew the wood into an arc and made another noose in the cord with which to catch and hold the free end.

He now had a tense figure of wood and buckskin, that would hold its shape even when he laid it by itself upon the

snow. Turning the thing over, he tested its tough elasticity by drawing upon the cord. The bent bar of hickory was like a flexed muscle, ready to strike or shove.

BUT still he was perplexed. He had started with a cord like Romm's, a stick like the Gnorrl throwing-tool, and had evolved something vastly different from either. As he frowned and pondered, movement rustled at his elbow. A small, firm hand came into view, with a round rod of wood. With this it plucked at the tight-drawn cord. A humming sound responded, like that of bees.

"It sings," came the voice of Ptao, Hok's small son. Serious blue eyes regarded the strange engine from under a shock of straw-yellow hair. Again Ptao plucked the taut cord with the haft of his toy spear, drawing it back and bending the bow a trifle. The strength of the hickory was too much for his young muscles, and it almost snapped the stick out of his hand.

At once Hok built upon his new ideas with still another.

"Let me see that little spear, my son," he said, and the lad trustfully handed over his toy. Hok had whittled it days ago from a shoot of ash, too small for a real javelin, and it was a faithful model of real weapons. The point had been made as sharp as a wasp-sting, and hardened judiciously in the fire.

Hok used the butt as Ptao had done, to evoke musical humming from the tight-drawn string. He pushed harder with it, carrying the string backward and bending the hickory length into a deeper arc. Then suddenly he let go, and with a whispering *thung* and a whack the toy flew some feet away. Ptao, light on his little moccasined feet, sped in pursuit and brought the thing

back to his father. Another try—another. And then Hok felt that he knew what might be done to make the work a success.

Drawing his flint knife, he scraped a notch in the butt of Ptao's little spear. This notch he used to catch the center of the cord, and clipped it there between the great fingers of his right hand. His left hand caught the wooden arc at the point where the balance would be on a javelin, and the forward end of the spear fell across and above his clenched fist. He held it in place with his forefinger, took a firm stance as though to throw. Then he lifted the device—and loosed.

With a great explosive whoop, the cord snapped taut again. It drove Ptao's spear forward and away—away, away, as a swallow hurtles to escape a falcon. Hok, his left hand still clutching the machine of wood and buckskin, stared after the shaft, his lips parting in his beard with amazement.

"It speeds!" he gasped. "It speeds—straight, and more swiftly and far than any javelin—"

"Father!" cried Ptao, alarmed and disappointed. "My spear—look, it is lost, out of sight over there in that thicket!"

Hok's free hand dropped on Ptao's tousled head. "Do not grieve, my son. Tonight, I will cut you another and better little spear—yes, and some more, to throw with this new weapon—"

He broke off, gazing once more along the path of the missile.

"*Boh!*" he cried, in imitation of the sound his engine had made at the moment it straightened and threw the missile; and a new word came, along with a new weapon and a new force, into the world of men.*

he saw, from rabbits to snow-bogged elk, missing again and again and losing several of his new-made arrows; but his skill improved with the hours, and he brought back a doe and some grouse. After that he practiced daily. He learned that the little darts he made would split if launched against a hard target like a tree or stone—a misfortune, for a good arrow was as difficult to fashion as a bowstave; but he improved his workmanship, and fumbled in Oloana's sewing-kit for some gay red feather-fluff to tie upon the shafts and make them easier to find after shooting.

Thus Hok grew proficient with the new weapon he called a bow, but he laid it away, with his arrows tipped with skewer-like splinters of bone. The wood was too weak, the buckskin cord tended to stretch. He would return later, when he had more time, to fashion a better bow. There was work to be done now.

The spring was foreshadowed by thaws and rains. The first crocus blossoms, white and yellow and purple, thrust their hardy faces out of drifts, and Oloana twined them in her black cloud of hair, looking forward to lilies and violets. Willow scrub burst into little furry tufts, then into catkins. The snow-patches dwindled and the game herds fattened on tender grass, while the skeletal trees clothed themselves in leaves once more. The lad Ptao, diligently practicing with the new spear his father had made for him, brought down a north-winged raven, and the hunters foretold for him a career as a great hunter. It became warm, bright, one could travel in clout and moccasins without winter's cumbersome fur mantles and leg-swathings.

* The word "bow" comes to us through Old English and before that through early German and Sanskrit, from some unthinkably old root; undoubtedly it is onomatopoeia—formed in imitation of the sound of a bow drawn and loosed, exactly as described here.—Ed.

THE next morning Hok went hunting, alone. He shot at everything

Then the awful day dawned.

CHAPTER IV

The Triumph of the Beast-Men

HOK had guessed that the Gnorrls would try something—one or two of their people had been killed by his hunters during the cold weather, and that meant attempts at revenge. The mystifying factor was Romm, wise and wicked and spiteful, who would incite and direct them. Hok kept a pair of scouts on the plains north of his settlement, and one morning those scouts came home in a breathless scamper. Sure enough, Gnorrls were coming—many of them, and very purposefully.

Hok gave orders swiftly. The Gnorrls always lived and moved in larger groups than true men,* but their organization was clumsy. Once before, mation—a formation like his own. They made a line, continuous but open. That line began to move forward at a steady lumbering trot. When it had moved well out, there formed and set out a second line, and then a third. Behind the third wave more Gnorrls bunched into clumps, as though to act as a reserve, rushing to whatever point the battle would develop.

"See!" growled Zhik. "Did I deceive you? More Gnorrls than we thought possible—and better armed—and wiser led! Hok, it is in my mind that this may be our last fight!"

Hok was thinking the same thought, and he resolutely put it from him. From the armful of javelins spread at his feet, he caught up one and set himself for the throw.

"Ready, all!" he thundered for his warriors to hear. "When they come within range, I will throw—do the same, each of you! Let this be a fight for the Gnorrls to remember all of their days!"

From the valley came cadenced howls and jabbers—the Gnorrls, too, were receiving orders from their war-chiefs. One such chief pushed ahead of the line, and Hok, watching him draw into range, whipped forward the first javelin of the fight. It struck his quarry full in the midriff. The Gnorrl chieftain fell, but his followers tramped unhesitatingly forward over the ground spattered with his blood.

Hok's men went into action the next moment. Every one of them was strong of arm, deadly of aim—few, if any, of that rain of javelins went wide of the mark. The Gnorrls fell like leaves in a gale. But there were more Gnorrls than javelins, and they did not falter in their advance. The gaps in the front were filled from the lines and groups behind.

"Back to the rocks!" yelled Hok, and followed his men there. They had placed other sheafs of javelins ready behind the ramparts, and began to hurl these. The range was point-blank now, the oncoming mass of Gnorrls so close that the defenders could see the glaring eyes and snarling fangs of their foemen. Hok's party was doing deadly execution—for a moment, Hok dared hope that even this mighty mass of enmity could be broken, driven back.

Fleetingly, he thought of his bow, but it was too imperfect and there was only one. There was only this chance—

But, even as the hope dawned, Zhik was tugging at his elbow.

"They are behind us!"

HOK turned, and saw. Another great cloud of Gnorrls, in open order, was bearing down from the left, moving to flank them and hem them in. Hok

* The Neanderthal brain was extremely developed at the rear, where many psychologists say that the social impulse has its basis; and it is certain that they lived in great hordes, while both Hok's people and more recent savages tend to gather in small communities.—Ed.

swore agonizedly.

"Retreat!" he thundered at the top of his lungs. "Throw all your javelins—quickly—and get out of here!"

He was almost too late. The charge from in front had come up to the barrier of rocks. For the moment, retreat was out of the question—men must fight, and desperately, with axe and club and stabbing-spear, to win free. Moments, precious moments that might score the difference between life and death, were eaten up in that hand-to-hand struggle.

Then Hok's force rolled back, leaving half a dozen dead behind—yes, and wounded too, pain-racked hunters to be clubbed and trampled by the Gnorrls. The reserve party of youths was trying to stem the flanking movement, and very unsuccessfully; for those Gnorrls had spears, and could throw them. They replied to the volleys of the young warriors, and several Gnorrl casts found their mark. With throaty war-cries, the attackers hurled their lumpy bodies into the fray.

They met Hok as he and his first line of defense found time to turn and run back. Before he could do otherwise, Hok grappled a grizzle-pelted Gnorrl in the forefront of the flanking horde.

The beast-man's ungainly, lump-thewed arms clamped about him, and Hok knew a moment of revulsion comparable to that which rises upon touching a snake . . . the very disgust gave him strength to tear the creature from him, slam it to earth and split the ridged skull with a downward sweep of his axe. Smoking blood and brains spurted forth to drench him. He was up and chivying his demoralized followers into a faster flight.

They distanced the pursuit for a time, then slowed up as Hok made a stand while Zhik and two other swift runners raced ahead to break up the camp—

against such a whole generation of battling Gnorrls as this, not even the home stronghold could stand.

Again the people of the riverside retreated, but perforce more slowly. They had to fight the foremost Gnorrls now and turn them back, so that the women could gain a start to southward, carrying the youngest children and leading those who could toddle.

It was a day to remember, all through the lives of those who survived it—a day to remember in nightmare visions.

Mercifully, the Gnorrls broke their early disciplined ranks, in their eagerness to overtake and kill. Thus, turning to defend the fleeing women and children, Hok's surviving warriors had only the swift-running vanguard of the enemy to meet—they were not too crushingly outnumbered. Thundering his wild war-cry, Hok actually ran to meet a leader of the Gnorrls, caught upon the haft of his stabbing-spear the terrific downward smash of a flint-headed club.

The blow broke his own weapon in two, but he flailed with the ragged end of the wood at the Gnorrl's face, made it yelp and give back; then, stooping quickly, he caught up the fallen piece with the spear-head and drove it like a dagger between the thick ribs of the thing's chest. For the sake of defiance, and to put heart into his own fellows, he sprang upon the floundering body and roared anew his challenge and triumph. But the moment was brief—the Gnorrl next closest threw its javelin, which swished past Hok's elbow and pierced the warrior just behind him.

Another flurry of hand-to-hand combat, with death on both sides. Zhik, white-lipped and fire-eyed, grappled a Gnorrl chieftain like a giant hairy frog, and the powerful monster tripped him and fell upon him. Hok ran in and brained the Gnorrl as it wrestled upper-

most, then caught his brother's hand and jerked him to his feet. After that, the great press of pursuing Gnorrls caught up, and again the men must run, to catch up with their women, form and defend again.

BY late afternoon they were far south of their camp. In the evening they came to a stream, a tributary of their own river, swollen by spring rains into a churning muddy flood.

None of the surviving tribesmen, faint with running and fighting and horror, wanted to attempt that crossing. But Hok, glancing back to where the leading Gnorrls were closing in once more, forced them to it.

He hurled in some of the big children himself, poking them along with the butt of his axe until, crying in terror, they struck out for the opposite shore. Their mothers followed perforce, and then the rest of the women. Hok swam across, encouraging and harrying, lending a hand here and there to weak paddlers who might go under or be swept away by the freshet; then, even though his mighty thews were agonizedly tired, he made his way back to fight the rear-guard action on the other bank. It was the last clash of the day, and the bloodiest. Gnorrls died. So did men; and only a handful of survivors were able to slip away, when darkness came and none could throw spears or clubs or stones after them as they strove in the water.

The Gnorrls, poor swimmers, made their campfires on the brink of the stream. Hok marshalled the remnant of his people and took them far away, until darkness was so thick that they could not see to walk or guess the way. Then, by the light of a little fire under the lee of a hill, he counted noses.

There were not many to count. Of his thirty warriors, eight still answered

to their names—every one a peerless fighter even against Gnorrls, every one wounded in several places. But now, Zhik was the only one whose eye shone fearlessly. The fifteen boys who had sallied forth with hopes of glory that morning were now but nine, and not a one of them but wept in forgetfulness of any ambition to be a warrior. Barp and Unn, Hok's young brothers, were both dead, cut down in the attempt to turn back the flanking party of the Gnorrls at the first encounter. Of the women, most had escaped—only a few sick and old had been cut off at the camp—and a good number of the children.

Hok's heavy heart lifted a little as his son Ptao came wearily to him and smiled a filial welcome. And Oloana, too, was there, having killed four Gnorrls with her own hand. Now she brought green leaves to patch the dozen cuts and slashes upon her husband's face and body, wounds he was now aware of for the first time.

Before dawn Hok had this stricken troop on the move southward. That day they saw the last of the hunting grounds they had so gloriously wrested from the Gnorrls years ago—driven, beaten, half obliterated, they were returning to the forests below, where game was scarce and rival hunters many. It was a doleful homecoming.

And the scouts on the rearward watch reported that the Gnorrls had not stopped following them.

CHAPTER IV

Two Against the Gnorrls

EIGHT days had passed, and the ninth was darkening into the night. Five chiefs of the southern forest clans sat around the council fire Hok had made in a pine-circled clearing, and

soberly disagreed with him; for in their eyes he was no longer Hok the Mighty, ruler and champion of the folk who held those good northern huntings—he was a beaten fighter, with his following cut to pieces, and in his retreat he had brought the Gnorrls south, further south than any living man had ever known them to come.

"The watchers say that they are as many as autumn leaves in a gale," said Zorr, the father of Oloana, squatting opposite Hok at the head of his young warriors. "It is best, perhaps, that we parley with them."

"Parley!" repeated Hok, as one who does not believe his ears. "As well parley with wolves, with boars, as with the Gnorrl. You all know that."

"But this man Romm is their chief," said a fellow named Kemba, scratching himself. "He can be reasoned with. As a matter of fact, Hok," and Kemba's voice took on a cunning note, "I think it is your blood he is after, not ours. What do the other chiefs think?"

All applauded save Zorr, who was not anxious to desert his son-in-law. Hok, still stiff with weariness and wounds, rose and glared around, his nostrils expanded like a horse's. He hefted his war-axe of flint, on the blade and handle of which the blood of a dozen Gnorrls had dried.

"I say, fight to the death," he snapped. "Who says the same?"

"I!" barked Zhik, and rose to stand beside his brother. A few more rose, in the rearward quarters where the subordinate warriors sat. Hok counted them, and they were his own veterans, fresh from the awful conflict and still scabbed over with wounds, but ready for all that to follow him into more games with death. One or two of the southern fighters rose with them, but none of the chiefs. Kemba sneered at Hok; he would not have dared to sneer

a season ago.

"You have our leave to head back to the north and fight," he said. "After all, it is your quarrel, not ours. We have never had to fight the Gnorrls."

"Because I stood between you and them!" Hok almost roared. "Kemba, if this were an ordinary matter, I would kill you for the way you talk. But there is not time or strength among us for any battle, save with the Gnorrls." He put out an appealing hand toward Zorr. "Hark you, father of my wife! I am not afraid to die—but what will become of Oloana? What of Ptao, the son of your daughter? Romm and his Gnorrls will not spare them."

Zorr's grizzled black beard quivered, but he shook his head slowly. "This must be a vote of the chiefs, and we must both bide by that vote," he reminded heavily.

"Listen to me," said Hok. "I have a new weapon. It is a thing of strong wood and buckskin, and with it I can hurl small javelins a great distance. With this weapon—if all our warriors learn to use it—we can drive back the cursed Gnorrls—"

"Would it take long to learn to use this—ah—strange weapon of which you speak?" a crafty-looking old man asked.

"Not long. Perhaps ten days. But until then we would have to fight them off with the weapons we now have."

The crafty-faced one smiled. "In ten days perhaps none here would be alive," he said. "It would be wiser to parley. I will not listen to madness."

"Listen, this once!" Hok roared then. "Listen, before voting—I offer myself as a single warrior against the Gnorrls. They had come this far, even among the trees, to spy him out.

Leaning close to the ground, his quick ear caught a noise — pit-pat, pit-pat. Two feet approached, near at hand and behind; another human being moved on

his trail. Even as he listened the noise ceased, as though the pursuer listened for him in turn.

Hok dodged sharply around some bushes. With a sudden flexure and jerk, he strung his huge bow, and upon the string notched an arrow. If this was the Gnorrl who had made the track, its pursuit of him would be short and tragic. His eyes found an opening among the bushes, and to this he drew his shaft, tense and ready to drive murderously home.

A body, stealthy and active, moved into his line of vision. Hok's fingers trembled on the verge of releasing the cord, then he suddenly relaxed his archer's stance and sprang through the bushes with a whoop.

"Oloana!" he cried; and his wife faced him, startled but radiant.

Her fine, strong body was clad in leopard fur, in her girdle she carried a short axe and dagger. Her hand bore one javelin while a second swung in a shoulder loop. On her feet were stout traveling moccasins, and the pouch at her side bulged as with provisions for a journey.

"I have overtaken you," she said breathlessly. "Which way do we go?"

Hok's tawny head shook emphatically. "You must return to the camp," he told her. "I face the Gnorrls alone."

"I am coming with you," she replied, as definitely as he.

"I forbid it." His bearded face was stern. "Your place is with the tribe, or what is left of it—"

"You made over the command to Zhik," she reminded him.

"Ptao is there—you should remain with him—"

"Ptao is a well-grown boy. You were not many years older than he when you became a chief. And you left him, too, in Zhik's care. I heard."

He tried yet again: "If I die, Olo-

ana—what if I die?"

She gestured the words out of his mouth. "If you die, Hok, am I to remain alive? Be a wood-carrier for my father, or — perhaps — marry for softness' sake, a man who is but the quarter of your shadow? I am your wife. I do not intend to be your widow. If you die, then I shall die, too."

And now Hok fell silent, letting her finish her argument.

"You are one pair of eyes, one pair of hands, against all those Gnorrls," she summed up. "Let me be your helper—watch in the other direction, strike a blow to defend your back. If one fighter has a chance to conquer, two might have a double chance. You are the chief—I am the chieftainess!"

Determination had come back into Hok's heart, and now joy followed it and swelled through him. He laughed aloud, and caught Oloana in his arms, hugging her with a sudden fierceness that squeezed the last gasp of breath out of her. Then he motioned toward the open country.

"Come then, woman. Hail! The Gnorrls do not know what misfortune is marching upon them!"

CHAPTER V

The Deceit of Romm

THEY camped that night on the stream that had saved their people from complete ruin, and it took them all the next day to re-traverse the ground they had lost in a single afternoon of running battle. Hok had a thought that made him grimace wryly—those Gnorrls made one travel fast!

Four times during the hours of light they lay flat in brushy clumps or among high heather while patrols—not mere groups, but patrols of Gnorrls moved by, in one direction or the other. Hok,

who could appreciate organized reconnaissance, saw at once that this muse be an important piece of Romm's work. The scouting Gnorrls travelled in half-dozens, with one active fellow moving well in front and two more some paces to right and left as flankers.

The leader and a subordinate held the central position, chattering orders, and at the rear point moved a "get-away" Gnorrl, who could scuttle back and warn his comrades if the rest were surprised and struck down. Gazing at these bands, Hok's eye gleamed hardly and his fingers plucked longingly at the string of his bow; but he sent no arrows. He was not seeking the blood of a Gnorrl, but of Romm.

In the evening they camped, fireless, in a thicket not far below their old fort-village. At sundown they heard distant howling and jabbering, from many hairy throats—the Gnorrls were worshipping the sun as it set. But when the last red ray had faded on the horizon, the clamor rose even higher. Why? Then Hok remembered that the beast-men had been seen bowing before Romm, the roan-headed. Romm would find such adoration glorious, but Hok could not think of it without spitting.

Anyway, that crude, harsh litany told him what he wanted. The main body was close at hand, while the observers and raiding groups were all to the south, combing the open country between here and the forest. Perhaps he had come just in time — the Gnorrls would be on the point of a concerted move toward the forest and the final defense position of his own people. Two days' march would take them there—but meanwhile, they would expect no enemies this close to the heart of their main body.

His early plan took even more definite form. He whispered to Oloana:

"No wild beasts will threaten, with

so many Gnorrls about—and no Gnorrl will move abroad in the dark. I will leave you here. Sleep lightly, with your hand upon your javelin. If I do not return before sunrise, go back southward."

Her hand found his in the night, her mouth kissed the side of his face. Then he moved stealthily out of the thicket, and along the way northward. The voices of the Gnorrls were guide enough.

He carried his strung bow in his left hand, with arrow notched and kept in place by his forefinger. At his right hip, within quick snatch of his free hand, hung both his axe and his dagger. His moccasins made no noise on the earth, for Hok was night-born and did not need to grope his way.*

A little shred of new moon rose, showing him his river, the bluffs and, as he drew near, great sleeping encampments of the enemy. He pressed close to the river to avoid these and so come undiscovered to the waterside shelf that gave narrow ingress to the hidden beach where his clan had once lived happily.

TOWARD the outward approach of that shelf he made his way, but paused. The wind blew downstream, and toward him. His distended nostrils caught the musky odor of Gnorrl — alive and close at hand. A sentinel bode there, proof enough that something of importance lay beyond. That something of importance would be Romm, and the Gnorrl chiefs who would make up his retinue and command-staff.

Hok came close to the rocks, pressed his big, supple body against them, and gingerly peered around the corner with one eye. There was light enough to see the guard — a big young Gnorrl, standing up to block the way, but quite

* The almost universal superstition that night-born persons can move surely at night seems to have some foundation in fact.—Ed.

evidently sleepy. The creature leaned its burly shagginess against the side of the runway, and supported itself with the butt of its javelin — weariness brought stupidity, Hok knew.

The lone adventurer drew back, unstrung his bow, pouched his arrow, and slung them both behind him. Instead he took his stabbing-spear in both hands, and again moved close to the entrance of the runway. The Gnorrl was within leaping reach.

Hok peered, gauged positions, distances, and above all the exact spot where the brute's wide, chinless jaw merged into the bull-neck. Then, with the smooth swiftness of a huge cat, he sprang from shelter and forward, his spear darting ahead of him and thrusting home, with all of his weight and force behind it.

The dull eyes of the Gnorrl opened, the slab-lipped mouth gaped; but then the flint point found its mark—the hairy protuberance in the center of the broad gullet, which has come to be called the Adam's apple. The spearhead split that lump of cartilage and killed the warning cry before it could be voiced.

Driven on by Hok's grim charge, the spear drove through windpipe, muscle, the bone and marrow of the spine at the back. Down flopped the slackening bulk of the sentry, and Hok, planting his moccasin-sole on the shaggy breast, wrenched his spear free. A lunging kick sent the carcass from the edge of the runway and into the quiet fast flow of the river.

Again Hok paused, listened and sniffed. No other guard waited at the far end of the passage, and he continued along it. Beyond, the light was better, and he could see the sandy space where once had been gathered his people's homes and possessions.

But the huts were torn down now, lying in ruins. The level sand, once

as clean and smooth as the cave-wives could make it, was foul with the remains of cooking-fires, heaps and scatterings of spoiled food, kindling, and all other untidiness of the Gnorrls. It was strewn, too, with sleeping figures, who sprawled and snored grumbly — the chief individuals of the great Gnorrl invasion that lay bivouacked on the nearby plains.

As he hoped, none had been astir save the guard he had dealt with just now. And there was but one fire—up above his head, just within the wide mouth of the grotto he once had inhabited.

DELICATE-FOOTED as a stalking wildcat for all his size and weight, Hok picked his way among the sleepers. One of them he had to step across, at the foot of the slanting pathway to the grotto, and even as he bestrode this figure it moved and moaned as in a dream. Hok froze tensely, his blood-drenched spearhead dangling within a hand's breadth of the open mouth; but then the Gnorrl subsided into deeper slumber, and Hok passed on. Like a blond shadow he stole up to the floor-level of the grotto and gazed in.

The fire was small but bright, made with pine knots; and before it sat a single figure, back toward him. Hok saw a shock of hair the color of a sky at sunset, protruding above a wolfskin robe that seemed to be drawn across humped shoulders to fend off the night's chill.

Romm!

HERE was the settlement of old scores, the defeat of the Gnorrls, literally within stabbing distance of him. Romm, living, had brought about this dire invasion, this threat to the very life of the human race; Romm, dead, would mean the crumbling of the top-heavy Gnorrl army, its return to a

mere unpleasant and solvable problem. Hok's hands tightened on his spear-shaft, and he moved forward, upon the floor of the grotto. A rush, a stab—and away up the path to the top of the bluff, a dash through the sleeping hosts, and back to Oloana in triumph!

His left moccasin took a long stride forward, and with a smooth gliding shove he put the keen flint into the wolf-skin, just where a spine should run between the shoulder blades. The seated form seemed to give his weapon no more resistance than an empty bladder, and it fell forward with his shove, into the fire. The red hair blazed up, into rank smoke. Hok clenched his teeth to keep from voicing an exultant cry of victory. . . .

Then, between his own shoulders, a cold, sharp point set itself.

"Do not move, Hok," said a quiet, jeering voice he knew. "Being thought a god, I made that dummy so that my worshippers would think I never slept; wakening yonder in the shadows, I saw you attack what you thought was Romm. But Romm lives; and if you so much as breathe deeply, this knife will slide into your heart like a snake."

CHAPTER V

The Fire and the Arrow

HOK'S first reaction, even before astonishment, was of chagrin—in his instant of success, he had been trapped like a big rabbit. That moment of self-denunciation kept him from moving, from whirling and trying to grapple Romm; and the same moment gave Romm himself the opportunity to make sure of his captive.

The roan-head must have held the knife in one hand and a noose of cord in the other. That noose now dropped over Hok's shoulders, jerked tight, and

pinioned him. A half-hitch snapped around Hok's ankle, and he found himself thrown violently. Then Romm knelt upon his chest, the knife at his throat, while he finished the binding as to elbows, wrists and knees.

"You may sit up now," Romm granted at length, and Hok did so, glaring. Romm was quietly exultant, his eyes dancing in their close-set sockets, his teeth grinning like a red-squirrel's. The renegade ruler of the Gnorrls examined Hok's weapons—the spear, the axe, the knife and finally the bow. "What is this thing?" he demanded.

"You pass yourself for a god among these beast-things," growled Hok. "A god should not ask for information."

Romm chuckled in his maddening way, rose to his feet and turned the unstrung stave this way and that. He studied the notch, narrowed his eyes in an effort to gauge purposes, and finally tried to pull the string into place. Romm's lank arms, though sinewy, did not approach the strength needed to bend that stiff bar of yew. At length he tossed it into a corner. He had not bothered to pry into the otter-skin pouch which Hok still wore, filled with arrows.

"It looks like a fishing pole, badly made," he said. "Well, Hok, you fished for me, but it is you who have been hooked and landed." From the fire he dragged the remains of the dummy he had made to simulate himself—winter leggins stuffed with dried grass, a cross of sticks to support the draped mantle in lifelike manner, and a gourd to which had been stuck, with balsam, tufts pulled from his own thick thatch.

"I made it to deceive the willing fools you call Gnorrls," he laughed, "and it did more—it deceived even the wide and brave Hok, and so saved my life."

"Why do you not kill me?" challenged Hok.

"That will come later. Tomorrow the Gnorrls must see you, bound and helpless. They will marvel more greatly at my power—thinking that my wisdom and magic snatched you, the one man they fear, from your hiding in the forest. And among us we will invent for you a death for all to see, and in which a great proportion may share."

"Be sure of my death when you see me dead," warned Hok in the deeps of his chest, and Romm laughed the longer.

"You are bound, helpless, while I am content to wait for my revenge," he said, "and there is no reason for us to sleep the rest of this night. Let us talk—about me as a god and you as a doomed man."

THE joyful commotion of the waking Gnorrls offended the sunrise and the blue spring sky; for at dawn Romm had summoned their chiefs and shown them his prisoner, the giant they called the Slayer From Afar.

Hok's reputation and fierce skill had kept his people from being obliterated on the retreat short days ago; only the thought of him had dampened the enthusiasm of the marchers for a bold entry and showdown under the shadows of the trees. And now they had him.

Because Romm was at his side as he was pushed and dragged up the high trail to the meadow where once he had won a certain javelin-throwing, the Gnorrls did not at once fall on him and tear him to pieces. But Hok knew that death was staring him between the eyes, and that this time the stare would not falter.

Well, he thought with fierce philosophy, these foul beasts who dared walk upright in grotesque semblance of man should see how a chief died. Meanwhile, his death here and now would stiffen the defense to the south—the vote of the chiefs had promised that.

If Oloana could know that he was lost, and slip back to safety. . . .

As if reading part of the thought, Romm spoke her name. "Do not be concerned for Oloana, your wife," he said, and smiled. "I myself shall comfort her for your loss."

Hok growled wordlessly, like a wolf, and it pleased Romm. "Yes, not all your people will die. I would be lonesome as one man, even though a god among the Gnorrls. The warriors will fall in battle, as they would wish. Such children as we capture can be reared and taught to obey me. And the women—a few—especially Oloana—"

Bound as he was, Hok sprang at him. It took the abhorrent hard hands of seven Gnorrls to hold him from knocking Romm down with the impact of his straining body, and for a moment the godly arrogance of the roan-head was tremblingly near a break. Only when Hok was thrust safely back did Romm find the note of mockery again. "Nothing you can do will save yourself, Hok—nor Oloana."

By that time Hok had gained his self-control back. His heart was white-hot within him, like a stone in the midst of a pit-fire; but there was clarity of thought within him also, the determination to foresee and find and use the chance that must exist, however slim, for a turning of the tables.

They had come to the middle of the meadow. Rich green grass showed through the higher patches of winter-killed weeds and cane, and to north and south ran thicket-like belts of brush. Where Hok was halted, with uncountable Gnorrls swarming close in great hairy droves and knots, some of the horde were planting a great upright pole. Around about the beast-people blackened the level space for two javelin-flights in every direction, and the bright air grew heavy with the foul

scent of them.

Hok's guards pushed his back against the pole. Others bound him fast with two turns of rawhide thong. One Gnorrl brought its knobby arms full of wood, which it arranged at Hok's feet.

Romm leaned on a staff—it was Hok's unstrung bow, that had so mystified him the night before. "You see the death I have planned?" he queried. "Slow fire—to roast, not burn . . . the Gnorrls believe that what they eat will give them its peculiar virtue. And so, when you are roasted, these Gnorrls will eat you!"

HE had stepped close, and the last words he flung out with his nose close to Hok's. The bound man gazed in disgust at Romm; and deliberately, as one who reckons with the results of his action, he spat in the renegade's face.

Every Gnorrl roared furiously, the whole of them as with one earth-shaking voice. There was a rush from all sides, but Romm flung up his arms and barked a single commanding syllable. The beast-men gave back grumpily, and Romm wiped the spittle from his flushed face. Then his toothy grin returned. Slowly he shook his head.

"It will not work," he said, in a voice like water under ice. "My friends here almost did as you hoped—tore you to pieces quickly and mercifully. But no. You will roast."

Hok let his gaze wander past Romm. He was bound so that his face turned south, toward the defense position of his people, toward the thicket where he had left Oloana. Many broad, brutal faces, with blub lips and chinless jaws and shaggy bodies, ranged before him to watch his miserable death. Beyond them was the green and brown of the meadow grass, more distant clumps and . . . yes . . . Oloana. That was her

head, thrusting craftily out of some willows. . . .

With a glowing coal of dead wood, Romm was igniting the fuel heaped at Hok's feet. Smoke rose, then a licking tongue of flame that scorched the captive's shank, mounted higher and singed the lion's skin he wore. The end was upon him . . . and Oloana was in the open, moving behind the backs of the intent Gnorrls, well within fair javelin-range.

"Oloana!" Hok roared, suddenly and at the top of his great lungs. "Throw a javelin—kill me! Then run!"

And she threw it. The shaft sang and shone in the air, came coasting over the heads of the Gnorrls, past the bending back of Romm, and struck—not Hok, but the stake to which he was tied, just beside his flank.

On the instant, Romm straightened and whirled. He, and every chattering Gnorrl, saw Oloana, poising her other javelin.

Pointing, the roan-head bellowed orders to his Gnorrls. It was as though Hok could understand perfectly; he was urging his followers to rush after the woman he coveted, capture her and bring her unhurt to him. Like a stampeding herd of cattle, the Gnorrl pack dashed past and away from the bound man at the burning stake, and in his eagerness for Oloana Romm ran with them.

EVEN before they had left him, Hok was alone, forgotten in the chase. He stiffened himself against the bite of the rising flame, and the wedged javelin-point rasped his ribs. Into his mind came inspired hope.

Writhing hard to the other side, he drew the rawhide that held him as taut as he could. A strand of it fell across the sharp edge of the javelin's head. The burning fire quickened his strug-



The flames crackled about Hok's feet, and he gritted his teeth. Then from a clump of nearby bushes a familiar figure darted. It was Oloana, and she loosed a wild shout as she launched her spear.

gles and jerks. Rased and stretched, the cord frayed, then parted. Another floundering heave, and Hok fell free, still bound as to hands and feet, but away from the fire.

His wrists he lifted to his mouth, tearing with his strong teeth at the confining leather. A thought's space more and that, too, parted. Then he was freeing his feet and knees, and stood erect.

Oloana had thrown her second javelin at Romm, and had missed—the shaft quivered in the earth, not a dozen paces from where Hok stood, and Romm raged in the midst of his great yelling cloud of Gnorrls. Hok saw his wife running beyond—not fast enough. She might distance the clumsy beast-folk, but not Romm.

He still felt fire; the otter-skin quiver, which had gone to the stake behind his hip, was ablaze, together with the arrows it held. He tore the thing from him, dropped it. Within reach of his hand lay his bow—Romm had laid it down to kindle the fire.

No time to lose; Hok's brain did a lurid sum in addition. Oloana fled, the Gnorrls pursued, he had the bow and flaming arrows. Could he—Snatching up the yew staff, he bent and strung it. From the smouldering quiver he whipped a straight arrow, that sprouted fire like a blossom. With a quick drawing pluck, he haled the shaft to its burning head, and sped it away—neither at Oloana nor at the Gnorrls, but at the ground between them.

It sang up through the air, then down. It dived into a shaggy bunch of reedy grass, killed by this winter but still standing, just as Oloana cleared that very spot. And the grass tore up in flames, bounding high and fierce.

The foremost Gnorrls cowered back. To them it was as if that fire had leaped magically from earth's heart.

Then, as if in beneficent alliance with Hok in his lone fight against myriads, breeze rose from the south and hurled the greating fire in a charging sheet upon the army of the Gnorrls.

CHAPTER VII

The Death of a God

HOK had only half-hoped for such a result of his shot; but, seeing the leap and rush of the fire, he saw and knew the chance that had come to him. He caught up other arrows, still burning, and sent them skimming away, to kindle other blazes in a line with the first. Before the Gnorrls could recover their initial panic and divide to dash around the first small grass-fire after Oloana, he had made a burning face between her and them—a fence that rose high and hot from several different points, and moved menacingly upon the shaggy host.

The Gnorrls retreated, and so did Romm. Hok, cut off from his wife by both Gnorrls and fire, ran, too—faster than any. He gained the top of a rise where the grass grew shorter, and felt that he had time to pause. He looked back.

At a good four ten-tens of paces, Romm had halted his hosts. They stood in their tracks, clumped around him, although the rising conflagration pressed close behind them. Why did Romm do this suicidal thing? . . . but as Hok asked himself that, the answer became clear. The renegade was kneeling, to twirl something between his hands—a fire-stick! That was it, Romm was making fire, with a hard wood spindle on a soft slab—fire in front of him, when at his back was a blaze like a forest of glowing heat!

Hok's mystified scowl faded, for he knew Romm's intention. The same

wind that brought burning death upon the Gnorrls from the south would carry this new fire ahead of them, giving them a burned-off refuge.* Hok leaped up and down upon his knoll, and bawled at the top of his lungs:

"Romm! I am free—free! I am going to kill you!"

Not until that moment had Romm realized that his prisoner was escaping. He straightened quickly, yelled a reply that Hok could not catch, then seized a javelin and rapidly wound it with his cord. With an explosive jerk he sped the weapon at Hok—it fell many paces short, and Hok laughed his loudest. Romm had a gesture of helpless disgust, then dropped to his knees and resumed his fire-making.

Hok had one arrow left. The fire had gone out on its bone-shod tip. Putting it to the string, he planted his feet, clamped the arrow-butt between his grasping fingers, and drew with all his strength. For a moment he paused with bow at full bend, gauging air currents, elevations, direction. He dared not miss . . . he let the arrow fly.

Romm never knew what death soared down out of the heavens. The darting shaft pierced him where his neck joined his shoulder, and drove on downward into his lungs. His throat filled with blood, he writhed upward from his knees to his feet, flourished his arms in frantic agony, and slammed down upon his face. He never moved again.

HOK, gazing, heard the voices of the Gnorrls. They jabbered in a way he recognized—it was the worship-clamor. The ugly monsters still stood where Romm had halted them, though the fire had come almost to their shoulders. Their arms extended toward him,

Hok. Their guttural cries were addressed to him.

They were worshipping Hok, as they had worshipped Romm. The enemy who had slain their red god was greater—they turned to him now, with their prayers and terrors. They pleaded for deliverance from the fire.

But Hok yelled again, to curse them. As if invoked by his curse, the fire suddenly whipped to greater and swifter banners of heat. It charged in among the Gnorrls, scorching and singeing. The things screamed in a way to deafen all the world, and began to run.

The whole meadow, with its reed-tussocks and bush-clumps was flaming around them.

Hok ran, too, far in advance of them. He did not turn back to see the destruction of his enemies. Changing direction, he came to the bluffs above the river, and sprang far out. The water hurried up to meet him, received him and closed over his head. He drove deep down into its troubled depths, but up he came in a moment, swimming hard with his free hand and trailing the bow behind him.

The current carried him quickly past the old beach where his folk had once camped and which lately had been the sleeping-ground of the Gnorrl chief. It was ablaze now, all the refuse and grass-bedding and trash having caught fire from sparks above. Below it the river widened and the current slowed; on the shore, the grass showed untouched by flame. Hok fought his way to the shallows, then to the waterside. Oloana came running to meet him.

"You are safe," she panted. "Yes—and you still have that thing you call a bow."

"It must dry carefully," replied Hok, "for it has stood our good friend this day. Tomorrow I shall cut new arrows for it." *(Concluded on page 129)*

*Frontiersmen often saved themselves from prairie fires thus.—Ed.

JOHN BROWN'S BODY

by DAVID WRIGHT O'BRIEN & Wm. P. McGIVERN

A strange thing happened when John Brown and his boss fell into the giant washer—a very strange thing indeed

THROCKMORTON making an inspection — this morning!" John Brown uttered the words in a horrified tone. His hands fluttered nervously. He looked helplessly around the washing machine department of Throckmorton's Department Store, then back at his fellow salesman, suddenly trembling.

"Oh, dear," he gasped, "I just know something will go wrong. I never was lucky on Mondays."

Thaddeus Throckmorton, owner and president of the store, would make one of his surprise tours of inspection this morning, and when Thaddeus Throckmorton "toured" there wasn't a department, section, or counter that was safe from his pompous, if none too nimble-witted, speeches and suggestions.

Mr. Brown had reason to tremble. For he had worries. Overdue payments to the Acme Loan Company, the inter-department sales contest, and now, to top it all off, the visit from President Throckmorton himself. John Brown prayed fervently that the collector from the loan company wouldn't come barging into the store while the Boss was around.

As he heard Mr. Throckmorton's booming voice coming down the aisle, he even thought of running madly from the store. But instead his watery blue eyes darted nervously over the fa-





With a hoarse scream, Throckmorton tumbled into the washer, followed immediately by John Brown.

miliar shining line of washers, swung to the middle of the floor, and rested on the giant model washing machine that had just been installed for advertising purposes.

A huge affair—six feet high and six feet wide—it had been the result of a brainstorm by Thaddeus Throckmorton himself. On his last visit to John Brown's department, Mr. Throckmorton, after "tsking" at the lamentable lack of sales, hit upon the idea of a colossal, glorified washer to lure customers closer to John Brown's wares.

Even John Brown was forced to admit the idea was a honey. And as the sounds of Mr. Throckmorton's voice

grew closer, the little washing machine salesman stepped closer to the gigantic display machine and with his handkerchief flicked a microscopic atom of dust from one of the steel braces.

Exactly three seconds later John Brown's heart plummeted to his heels, then promptly shot upward to catch somewhere in the region of his throat. Mr. Throckmorton had arrived!

The president and owner of Throckmorton's Department Store did not enter the washing machine sector—he invaded it. A general at the head of his legions could not have impressed John Brown more than the portly Mr. Throckmorton, followed by subalterns, did at that moment.

John Brown coughed, almost strangling, then blurted a squeaky "Good morning." Then, hastily in afterthought: "—sir!"

Mr. Throckmorton's large, expensively clad body turned to face the stooped, drab little salesman. The president was dignified, pompous, and impressive. But no one could say he was not democratic. He said, "Good morning, Brown."

Then, with a firm, searching, uncompromising eye, Mr. Throckmorton surveyed the section in which he stood. An almost paternal gleam shot into his eye as he spied the colossal display machine.

"Sales improved any since this has been installed, Brown?" inquired Mr. Throckmorton in a tone of voice which implied that sales damned well *should* have improved.

"Yes," said the breathless Mr. Brown. "Yes, sir."

"Harrumph," the owner made a pleasurable noise in his throat. "Harrumph, quite naturally." He strode to where the machine stood in the center of the section and, raising himself on tip-toe, peered into its depths.

"Pardon me, sir," ventured Mr. Brown. "Pardon me, but you can obtain a much more satisfactory view of the inner workings from the special platform on the other side."

"Capital," said Mr. Throckmorton. "Very interesting exhibit. My own idea, I might add."

Mr. Brown led his employer to the other side of the machine where they ascended a series of wooden steps leading to an elevated platform from which they could gaze comfortably down into the bowels of the machine.

"Big, isn't it?" said John Brown, peering over his employer's shoulder.

"Quite," said Mr. Throckmorton proudly. "Biggest of its kind. Turn it on, please."

John Brown bent over and his hand found the switch that started the huge machine revolving. As the noise of the motor picked up momentum he stared in rapt fascination at the giddy whirl of paddles and discs inside the spacious stomach of the washer. By the time he straightened up the humming had grown to a smooth roar. He stepped forward to gaze downward. Then, like a bursting bomb insofar as results were concerned, the terrible thing happened.

His feet tangled with the electric cord that ran along the platform, and in the next instant he lost his balance and lunged forward. His bony shoulder drove into Mr. Throckmorton's wide back, and for an awful minute they staggered on the brink of the machine.

And the next instant, with a hoarse bass bellow from Mr. Throckmorton and a shrill soprano scream from John Brown, they tumbled into the whirring machine.

THE screaming whistle of the revolving demonstrator, the roar of the

motor, the wild shrieks and shouts that issued from the washer all blended together in a weird crescendo, instantly creating a commotion in the store.

Salesmen and clerks, floorwalkers and customers, all raced to the spot. Mr. Darnell, of neckties and ribbons, arrived first. He ran up the steps in back of the machine and yelled over his shoulder, "Get a stretcher. Somebody fell into the big washer." He threw off the switch and stared with anticipatory horror as the huge disc began to slow down, expecting to find a tangled mass of arms and legs. But instead, as the revolutions decreased, he was amazed to see both occupants unscathed and unharmed.

It was a further shock when he recognized the portly frock-coated figure of the store's president. Mr. Throckmorton seemed to be all right and was making a ludicrous attempt to rise to his feet in spite of the rotating machine. The other figure in the machine was sitting up with his hand pressed tightly over his eyes.

The frock-coated figure of Mr. Throckmorton staggered a little and then collapsed in a very undignified heap. He stared wildly about, then threw an arm about his face.

"Please," he wailed, "it was an accident. I couldn't help it. I stumbled. Please forgive me," Mr. Throckmorton said. "Please, don't fire me!"

The small figure in the sack-like brown suit sat up with a jerk, shaking his head. "You stupid clumsy fool," he bellowed. "You damned near killed me. I'll have you fired so fast it'll take your breath away!"

Mr. Darnell, of neckties and ribbons, opened and closed his mouth like a gaping fish. Was he crazy, or was Brown really giving Throckmorton hell? And was Throckmorton begging Brown not to fire him? It was incredible.

The large impressive figure in the frock-coat was on his knees almost crying over the rumpled little man in the baggy brown suit.

"Oh please," Mr. Throckmorton begged, "give me another chance." He fumbled in his pocket for a handkerchief, wiping a tear from his eye. "I couldn't help it," he wailed again. "It was an accid -" His voice broke, faltered and stopped in his throat.

He stared incredulously at the large diamond cuff links that were attached to his shirt. Like a man in a dream his eyes traveled up his fat arms and down his expansive front. Diamond stickpin, figured cravat, silk shirt, expensive English suit. Horror-stricken, he felt his face. Soft smooth skin, double chin, fat bulging jowls. Panic-stricken he climbed to his feet.

"What's happened to me? My body . . . !" cried the frock-coated figure wildly.

"Everything's all right, Mr. Throckmorton," Mr. Darnell said, his face pale with anxiety. "I've sent for a ladder. It's coming directly."

"But I'm not Mr. Throckmorton," he protested wildly. "I'm John Brown."

Mr. Darnell tried to smile understandingly, but only succeeded in looking very bewildered. "Of course, Mr. Throckmorton. You're a little shocked. Terrible experience to go through."

"Stop calling me Throckmorton," John Brown said hysterically. "I just look like him. This is his body, but I'm really me."

"Of course," said Mr. Darnell, "you're you. You're Mr. Throckmorton." He pointed to the machine. "There's Mr. Brown."

JOHN BROWN looked and found himself looking at himself. Not as he was now, but as he should be. Baggy brown suit. Thin brown hair. Weak

blue eyes. John Brown closed his eyes and counted to ten. It didn't help. And John Brown abruptly realized the truth.

"We've changed bodies—somehow!" he said to himself in an amazed, hoarse whisper.

The figure on the floor was still rubbing his eyes and shaking his head. "Help me up," he shouted. "Try and kill a man and then refuse to help him, eh? I tell you, Brown, you'll regret this day as long as you live. You can't trifle with a Throckmorton and get away scot free."

John Brown stooped over and helped him to his feet. "I'm sorry," he began, breathless with unaccustomed effort, but the other cut him off.

"Sorry!" he exploded. "A fine thing to tell a man after you've nearly killed him. I . . ." His mouth fell open. His eyes bulged out until they looked like huge marbles. He opened and closed his mouth soundlessly once—twice—then fainted quietly away.

Someone was sliding a ladder into the machine and in a few seconds Mr. Darnell and two of the uniformed maintenance men were descending into the washer.

"Terrible experience," said Mr. Darnell. "But everything's all right now."

John Brown stared at his strange fat body and heaved a terrified sigh. As the brisk men in uniform picked up his limp and sagging body, he felt like crying.

"Everything is all wrong," he said unhappily.

"Terrible experience," said Mr. Darnell for the third time. "Mr. Brown will be all right I'm sure. They're taking him to the employees' washroom for first aid."

"They can't do that," John Brown cried, suddenly horrified.

"It's a pleasant enough washroom," Mr. Darnell said timidly. "Couch, first

aid—"

"You'd better take him to his office."

"But, Mr. Throckmorton, Mr. Brown has no office."

John Brown stared strangely at his new body again, then made a sudden decision.

"But of course," he amended. "For a moment I didn't think. Have Mr. Brown brought to my office."

"Yes, sir. Anything else?"

In all of John Brown's drab, colorless forty-three years of existence no one had ever called him "sir" and waited expectantly and diffidently for another order. It was a heady intoxicating feeling. Like strong wine. John Brown took a deep breath, fingered his heavy gold watch chain.

"One more thing."

"Yes."

"Be quick about it."

"Oh yes, sir." Mr. Darnell bobbed his head and ducked off down the aisle.

JOHN BROWN watched him hurry off and there was a strange speculative light in his eye. It was the first time in his life that he had ever known the thrill of power.

In spite of the delightful feeling of importance that his new presence gave him John Brown was glad to see his old body being carried into Mr. Throckmorton's office. He turned to the curious crowd in the doorway and fixed them with a cold stare.

They melted away.

He instructed the attendants to stretch their burden on a comfortable daybed that was placed against the wall and then dismissed them.

He surveyed the luxurious surroundings with satisfaction. Not half bad. He seated himself at Mr. Throckmorton's gleaming mahogany desk and waited for the president to come around.

It was a very odd situation. It was

more than odd. It was unbelievable, incredible, amazing and unimaginable. Still it had happened.

He, John Brown, was J. Thaddeus Throckmorton and the pompous department store head was now an ordinary wash machine salesman. Poetic justice, that's what it was!

John Brown opened a teakwood humidor and selected a fat perfecto cigar. He was just touching the flame from the silver desk lighter to it, when the figure on the couch groaned, and struggled to a sitting position. Throckmorton, in John Brown's body, stared blankly about the room for an instant, then leaped to his feet. He looked down at himself, felt his face and then rushed to the desk.

"It's some kind of a trick," he shouted. "Get away from my desk, you impostor."

"It's no trick," John Brown said. "Something happened to us in the washer. We switched bodies."

"That doesn't give you any right to sit there smoking my dollar cigars. I am J. Thaddeus Throckmorton. Nothing can change that."

"Sure," John Brown admitted. "You're Throckmorton. I'm Brown. But only two people in the world know that. If I wanted to I could call the building police and have you thrown out of my office. If you kept insisting that you were me they'd lock you up in the booby hatch. I don't like this any better than you do, but we'll have to make the best of it until something straightens us out."

Throckmorton collapsed in a chair as if his legs were suddenly filled with water. "But what am I going to do?"

John Brown blew a cloud of smoke toward the ceiling before answering. "There's a job in the washing machine department that needs a good man. You can have that. You see, I don't need it

any more." He leaned back in the cushioned swivel chair and smiled complacently. "I seem to have been *promoted* a little."

Mr. Throckmorton was gazing at John Brown with a sort of dawning apprehension. When at last he found his voice he spoke in a husky whisper. "You, you mean you're going to let this continue?" he gasped.

JOHN BROWN folded his thick hands over his new stomach and gazed benignly at the figure he used to be. "Why not?" he inquired with cold matter-of-factness. "What is there that we can possibly do about it?" Then he smiled thoughtfully. "Besides, with the exception of my rather absurd new body, I think I rather like what has happened. I'm a lot wealthier, have a *lot* more power at this minute than I had fifteen minutes ago."

Mr. Throckmorton, from his new but very drab body, could only sputter in futile rage. "What," he managed to blurt after a moment, "is wrong with my body?"

"Which," asked John Brown with devilish amusement, "your new body, or the one I'm wearing at present?"

"My own, my honest-to-goodness, genuine body!" spat Mr. Throckmorton. "What's wrong with it, I say?"

Mr. John Brown looked thoughtfully at his portly new figure. "Well," he said after a moment, "it's horribly fat to begin with. Then, you're not the handsomest devil in the world, y'know." He held up a warning hand as Mr. Throckmorton began to protest. "And your taste in clothes is much too loud, too pretentious. You dress, if you'll pardon my candor, in a more or less hideous fashion."

"Damn you, Brown," snarled the store owner, "I resent your remarks. I ought to fire you!"

"Tsk," admonished John Brown. "Remember your new station, Mr. Throckmorton. You are now a washing machine salesman. If there's any firing to be done, I'll take care of it. I'm president, remember."

Thaddeus Throckmorton, speechless with rage, could only glare helplessly at John Brown as he continued.

"Yes," said Brown reflectively. "I am going to outfit you—that is, myself, in some decent raiment. Something less ridiculous than what I'm wearing at present."

"Leave my body alone," shrieked Thaddeus Throckmorton. "It's dressed in the best of taste, and I won't have it looking foolish! Leave those clothes exactly as they are, do you understand me?"

"It's my body, now," declared John Brown. "At least my personality is inhabiting it at the moment. I refuse to have my personality dashing about in such ludicrous garments. The body is bad enough, Lord knows, but I don't have to look like a circus clown on top of it."

Mr. Throckmorton turned the matter over to the gods, and once his choice selection of epithets was concluded he buried his face—or rather, John Brown's face—in his hands. "Ohhhhh," moaned the president of Throckmorton's Department Store, "ooooohhh!"

"Come, come," demanded John Brown after several minutes of this, "stop all that carrying on. You don't hear me complaining, do you? After all, I haven't got the best bargain in the world from this. There isn't any sense in crying over spilled personalities."

Mr. Throckmorton gave him the benefit of an anguished glance. "It's easy for you to talk," he sobbed. "But I'm the one to get the worst of this deal!"

"Tush," cried John Brown. "I think you'll do well selling washing machines,

once you get the knack of it. They're a lot of fun. Besides, think of the twenty percent commission you're working on. A man can do a lot on twenty percent commission. In no time at all you ought to be department head."

"Yes?" said Mr. Throckmorton dubiously.

"Absolutely," John Brown assured him. "There is plenty of room for promotion in Throckmorton's. It's a sort of a slogan, y'know. So you shouldn't feel amiss starting as a washing machine salesman. There's plenty of room for promotion."

"Fluuumph," said Mr. Throckmorton. "I'd almost forgotten that slogan."

"I've never forgotten it," said John Brown casually. "I remember hearing it eighteen years ago when I started selling washing machines here."

Mr. Throckmorton broke out in a new series of groans, and John Brown, smiling quietly to himself, exhaled expensive blue clouds of smoke thoughtfully at the ceiling.

Quite suddenly, Mr. Throckmorton seemed to calm down. Noticing the swift transition of manner, John Brown looked at him in perplexity. Something was wrong somewhere. Throckmorton, in Brown's body of course, was almost looking pleased. He was whistling a half-tune through his teeth, an old habit of John Brown's when secretly happy about something.

"Remind me," John Brown told Mr. Throckmorton, "to discard that irritating whistle when I get my own body back. It's extremely annoying."

"I'm very pleased," smirked Mr. Throckmorton. "Very, very pleased at what I have just remembered."

"So I gather," John Brown acknowledged dryly. "I seem to remember my own face well enough to know when it is registering signs of pleasure. Might I ask what it is that makes you look

like a cat at a banquet of canaries?"

Mr. Throckmorton rose swiftly. "Nothing," he lied easily. "I was just thinking, that's all. Just thinking."

With that, Mr. Throckmorton crossed to the door and turned momentarily to face John Brown. "Have to be getting downstairs, I suppose. Washing machines to sell, and all that," he smirked. "Toodle-oo!"

FOR three minutes John Brown, in his new body, sat staring thoughtfully at the door. Mr. Throckmorton's exit had left him rather bewildered and vaguely uneasy. What was the ex-president so damned pleased about? Why had the sudden change come over him? John Brown was not long in finding out.

There was a precise tapping on the door, startling Mr. Brown out of his mental misgivings. "Come in," he snapped. "Come in and stop that damned rat-tat-tat."

A short, thin, bespectacled young man whom Mr. Brown remembered as being secretary and aide-de-camp to Mr. Throckmorton, stepped into the room. John Brown remembered that his name was Quaggle and that he was a sort of junior executive in the store.

"Well, Quaggle?" Mr. Brown forced his voice to carry the coolness commonly associated with authority.

Quaggle cleared his throat noisily, inserting a thin finger beneath his stiff collar. "Frankly, sir, I'm worried," he declared throatily. "The situation is serious."

"What situation?" Brown asked blankly.

Quaggle choked back his amazement, and with reproach dripping from his every word, replied, "Why, THE situation, sir, concerning the bank's refusal to extend your loan."

If John Brown had been sitting in

an electric chair, he couldn't have been more shocked. Loans, Debts, Trouble, the Three Musketeers of Mr. Brown's past life, were once more cropping up to plague him in his new existence!

Quaggle continued, apparently unaware of the hunted look that had suddenly crept into the other's eyes. "What do you plan to do about it, Mr. Throckmorton?"

John Brown realized that a reply was expected—swift, sure, and decisive. John Brown could think of nothing swift, sure, or decisive to say. But he tried.

"It's an ill wind that hasn't got a silver lining, Quaggle," he said reassuringly. "Remember that!"

"Why?" Quaggle asked logically enough.

Brown had a sudden inspiration, remembering a poem from his high school days. "Yours is not to reason why, yours is but to do and die!" he blurted triumphantly.

Quaggle backed toward the door visibly impressed. "Yes, sir. Quite right. It is a pleasure to realize that you are ready to face them!"

John Brown paled. "Face who?" he heard his voice saying weakly.

"Why, the gentlemen from the bank. At the board of directors' meeting, at two o'clock this afternoon." He stopped to stare apprehensively at his employer. "What's wrong? Do you feel ill, sir?"

John Brown was clutching miserably at Throckmorton's overstuffed midriff. "I have a headache," he wailed, "and *he* has to pick this moment to get indigestion. Between the two of us we're driving me mad!"

This was too much for Quaggle. He flew from the room . . .

WHEN J. Thaddeus Throckmorton, vested in the person of John Brown, arrived on the floor of the wash-

ing machine section he was humming happily. It was almost with a sort of fondness that he gazed at the gigantic display washer which had been the cause of his present state. There were worse fates than being a washing machine salesman. Washing machine salesmen had small worries and smaller salaries. But they were better off, far better off, than department store executives about to be thrown into bankruptcy.

Mr. Throckmorton threw John Brown's thin shoulders back and inflated John Brown's chest. For the first time in many moons there was a swagger in John Brown's manner.

"Jesta minute, fella!"

Mr. Throckmorton felt a hand jab him forcefully between the shoulder blades, and he turned to face a thin, sharp-nosed, moustached individual wearing a belligerent smile.

"Yuh're John Brown, ain't yuh?"

Mr. Throckmorton hesitated only a moment. "Yes," he acknowledged.

"Well, Brown," the thin man's beady eyes gleamed triumphantly and he pulled a notebook from his pocket, "I'm from the Acme Loan Company."

"So," said Mr. Throckmorton icily, "so?"

The false smile faded from the crooked mouth. "Don't git uppity, Brown. I ain't no vassal. I'm here to see that you make yer payment fer last month, or else."

It occurred to Mr. Throckmorton that he had been stupid to imagine John Brown had no debts. Oh, well, probably some piddling thing. Write out a check for the fellow and clear it up. In the next instant Mr. Throckmorton recalled that he could no longer write out checks.

"Or else what?" said Mr. Throckmorton. He rather liked that. He had heard the phrase once in a gangster movie, but had never been able to use

it inasmuch as no one ever said "or else" to Thaddeus Throckmorton. He almost had a warm feeling toward the collector for giving him the opportunity. "Or else what?" he repeated.

"Or else—" The irritating collector moved in closer and pushed his forefinger against his debtor's chest "—we'll have to garnishee yer wages! It might mean yer job, Brown."

Mr. Throckmorton wrinkled John Brown's forehead in perplexity. He would have to find out more about this. "How much do I owe?" he asked.

"Two hunnert bucks is the principal. Yer interest fer this month and last month is fifteen bucks." The collector had opened the pages in his notebook and was running a grimy thumb down a column of figures.

"Here." Mr. Throckmorton grabbed the book from the fellow's paws. "Let me see that." In the next moment his jaw fell open in sheer astonishment. "Why," he blurted, "this debt is over four years old!"

"No foolin'," said the leering collector.

"And I've paid, that is, *he's* paid—"

"*You've* paid, Brown. Don't give me none of that *he* business," the collector corrected.

"I've paid the Acme Loan Company well over four hundred dollars in that time!" finished the astounded Mr. Throckmorton.

"So what?" said the collector, scratching his scraggly moustache nonchalantly.

"That's twice the amount originally borrowed! Which amounts to nothing more or less than sheer banditry!" stormed Mr. Throckmorton.

"Look," said the collector with feigned boredom, "are yuh gonna pay up yer installment, or aren't yuh? Make up yer mind, Brown. If yuh don't pay, we'll take the matter up wit

yer boss!"

John Brown would have trembled under such circumstances. But Thaddeus Throckmorton was not used to trembling under *any* circumstances. Mr. Throckmorton's personality directed. John Brown's body acted. In the next several minutes the patrons of Throckmorton's Department Store were amazed to see a drab, somewhat moth-eaten little salesman ushering a terrified and bewildered collector out of the premises by the scruff of the neck.

"And if I see you around here again," bellowed Throckmorton with a well directed kick at the collector's nether extremities, "I'll have you put in jail!" Having concluded an unpleasant matter, Mr. Throckmorton rubbed John Brown's hands together with some degree of satisfaction, turned and retraced his steps to the washing machine section.

"Now to get down to work," he muttered, striding onto the display floor. . . .

"**N**OW to get down to work," said the small, white-haired, sour little man at the head of the gleaming conference table. John Brown, seated at the opposite end of the table, shivered apprehensively. The rasping voice of the white-haired gentleman had jerked him back to reality. For the past hour he had wandered aimlessly about the spacious offices of Thaddeus Throckmorton in a sort of semi-stupor, half-dazedly, half-frantically trying to figure out a solution to his dilemma. But only two solutions had offered themselves—one to confess the incredible body-swapping of the past hours, the other to commit suicide. The first was out of the question, and he lacked the courage for the second.

And now, somehow, he found himself sitting at the ringside of his own Water-

loo. The sour little gentleman, Pearson, president of the bank, was looking balefully at John Brown, letting the silence of the room weave into a cold blanket around him. At length he spoke.

"Throckmorton, I, for one, have had about enough of your eternal twaddle. Your bullying, blustering stupidity, your confounded unreasonable egotism, have just about bankrupted this store."

"But—" protested Mr. Brown.

"Never mind the 'buts,'" Pearson continued acidly. "You're not bullying us any longer. Your high-handed methods and your refusal to take advice are the reasons why we won't trust you with another cent of our money."

In all of John Brown's forty-three years of existence he had never bullied anyone. In fact it had never even occurred to him to bully anyone. He felt he was being unfairly treated. Instinct brought him to his feet, opened his mouth in protest.

Mr. Pearson sensed the beginning of another Throckmorton tantrum. He was determined to nip it in the bud. "Sit down," he bellowed. "I have the floor!"

Everyone in the room, including Mr. Pearson, was amazed to see the portly, frock-coated figure slump meekly into his chair. Mr. Pearson was surprised and gratified by the easy victory. In a kindlier tone he continued:

"After all, Thaddeus, you've no one to blame but yourself. If you had taken our advice, as well as our loans, the last two times, you wouldn't find yourself with your back against the wall now. Under the circumstances, we can't renew the loan." Mr. Pearson sat down with an air of finality.

Everyone in the room regarded the frock-coated figure of the department store owner half-fearfully, half-expectantly. It had never been the nature of Thaddeus Throckmorton to take a

blow sitting down. Seconds ticked into a minute, and still there was silence.

Mr. Pearson cleared his throat. "Well?"

Every eye in the room was fixed on John Brown as he rose to reply. "You are quite right," he said simply, resuming his seat.

IF he had ridden into the room naked on a tricycle, John Brown could not have created a greater furor. Out of the sudden tumult and babble of voices, Mr. Pearson's thin cry for order was heard. When the room had at last quieted, the white-haired little banker spoke.

"Did I—did I hear you rightly, Thaddeus?" There was shocked astonishment in Pearson's voice. "Do you actually agree with us?"

The portly figure rose again. "I not only agree with you, I might add to your statements. Thaddeus Throckmorton—that is to say the *old* Thaddeus Throckmorton—was also an overbearing, asinine know-nothing." John Brown then resumed his seat, feeling a certain vicious satisfaction in having so humbled the body of the man who had been his overlord for eighteen years. Come what may, he had gotten even with Thaddeus Throckmorton.

Mr. Pearson's voice was unsteady as he spoke. "This is incredible. If you can stand before us, Thaddeus, and openly admit your shortcomings, you're a better man than any of us had imagined." There were murmurs of assent throughout the group. "It's obvious that you've changed, how or why is unimportant. The fact that you have, is all that counts."

There was a general murmuring of assent, with only a few protesting voices breaking through. When Pearson resumed, Mr. Brown was stunned by the drastic reversal of fortune. It

was so unexpected—so impossible—he couldn't believe his ears. "We had made up our minds not to advance a nickel to the old Thaddeus Throckmorton, but the situation is drastically reversed. We'll give you your loan!"

There was a brief, dramatic silence, immediately followed by a wild burst of applause. Then the directors were surrounding John Brown, slapping him on the back, pumping his hand. He struggled to his feet, dazed. Out of the sea of beaming faces swimming in front of him, he saw Mr. Pearson. "Congratulations, Thaddeus. Whatever made you change so?" the banker smiled.

"I wish I knew," said John Brown mournfully. "I only wish I knew!"

* * *

THADDEUS THROCKMORTON, in the person of John Brown, stood on the floor of the washing machine department. He raked his eyes over the circle of curious customers drifting about.

"By thunder," he shouted, "you need washing machines and I'm going to sell 'em to you. You need washing machines more than any crowd I have ever seen." He paused to let this sink in and then suddenly pointed dramatically to a large florid-faced gentleman who blushed painfully as Throckmorton glared at him.

"You," Throckmorton said bitterly, "look as if you haven't laundered that shirt you're wearing for two weeks. It's a disgrace. I doubt very much if the management would allow me to sell you a machine. After all," he said frigidly, "a Throckmorton washer has a certain position to maintain."

"Is that so?" the florid-faced gentleman said belligerently. "If you think I'm not good enough for your machines you're nuts. I'll buy a machine—I'll buy two machines and you won't stop me. If you try it I'll sue you and the

company for plenty."

"If you're small enough to take advantage of a legal technicality," Throckmorton said icily, "there's nothing I can do about it. Take the machines. Both of them," he added with a peculiar gleam in his eye.

In a minute the florid-faced gentleman was signing the order blank which Throckmorton had thrust contemptuously into his hands.

"I know my rights," he said loudly. "These big stores can't make a monkey out of me." Holding his receipt aloft like a victory banner he struggled through the growing crowd and disappeared.

Throckmorton paused only long enough to insert a fresh order blank in his book before singling out the next victim. His greedy eye fastened on a pale, thin young man in the front row.

The intended victim began to cast about for an avenue of escape as Throckmorton bore down on him.

"Young man," Throckmorton began pleasantly enough, "you need a washing machine."

The prospect retreated a step. "No," he said feebly, "I don't."

"Don't contradict me," Throckmorton said sharply. He extended the order blank inexorably. "Right on the bottom line."

"We send our laundry out," the thin young man protested.

"Stop changing the subject," Throckmorton said irritably. "You're trying my patience. I warn you, don't push me too far. No more nonsense. Sign right here."

"But," the young man repeated wildly, "we send our laundry out."

"Oh for the Lord's sake," Throckmorton exploded, "will you stop drooling about what you do with your laundry? You've just about exhausted the possibilities of that subject."

"But what'll I do with a washing machine?"

"This is not the information desk," Throckmorton said witheringly. "But since you are apparently incapable of thinking for yourself, I'll tell you. You can wash the dishes in it."

The young man looked dubious. He also looked desperate.

"Won't they break?" he asked hopefully.

"Not if you use cardboard dishes," Throckmorton said in the tone one uses with a backward child. "Now," he continued ominously, "any more objections?"

The young man shook his head weakly. He signed falteringly and scuttled away shaking his head foolishly.

CUSTOMERS, attracted by the crowd, were hurrying to the scene, jostling one another and overflowing into the aisles and adjoining sections.

Throckmorton was in his element. He was always at his best before a large audience. And now he proceeded to go to town.

"Take your time," he said in a voice that would have done justice to a circus barker. "There's one for everybody. No one will be disappointed." He ran an eye over the crowd and at that minute a happy inspiration occurred to him. It was so simple that he wondered why he had not thought of it at once.

"To save time," he announced pompously, "I shall have to ask you to form a line, starting at this counter and extending back as far as necessary. In that way I won't be bothered running about from person to person." He clapped his hands together smartly. "Quickly now, double file. A little snap to it, please."

A lieutenant, perhaps even a general, would have envied the authority Mr. Throckmorton put into these last com-

mands.

Those on the fringes of the crowd began to melt away, but the majority, hypnotized by Mr. Throckmorton's Napoleonic manner, filed meekly into line.

Like a bossy traffic cop, he harangued them until an orderly procession wound snake-like out of the washing machine department and into the rest of the store. Then, pompously and importantly, Mr. Throckmorton strode to the head of the line. Rubbing his hands gloatingly he went to work.

It was mass production for the masses. Assembly line selling. As the line filed past Mr. Throckmorton the stack of signed order blanks grew higher and higher. The few who demurred were contemptuously dismissed and subjected to a violent storm of abuse as they departed.

Mr. Throckmorton was enjoying himself immensely. He was enjoying himself to such an extent that he didn't feel the tap on his shoulder until it was repeated for the third time.

He swung around, rather annoyed, to meet the stern and disapproving presence of Mr. Codger. Mr. Codger was floor manager. Mr. Codger stared at the crowd, at the apparent confusion and finally at what he thought to be Mr. Brown. He tweaked his sharp nose, a habit of his when he was not pleased.

"We are not," he said coldly, "conducting a rummage sale. Your sales tactics are definitely out of line with our policy. If it happens again, Brown, you're through."

"To blazes with our policy," Mr. Throckmorton bellowed. "I'm selling washing machines." He picked up the thick pile of orders and shoved them into Mr. Codger's hands. "Take these down to the stock room. Be back in an hour for more."

Mr. Codger leafed through the blanks with widening eyes. Then he jerked a

long form blank out of his pocket and ran a finger down a column. He grabbed Mr. Throckmorton by the arm, spinning him around.

"Don't sell any more machines," he hissed. "You've already sold more than we have in stock. It'll be two weeks before we can get another supply. Now get these people out of here."

"All out, eh?" observed Mr. Throckmorton with no little regret. "And just when it was getting to be such fun." He was turning away from Mr. Codger when a gleam leaped into his eye, caused by the sight of the huge display washer.

"How about that one?" demanded Mr. Throckmorton. "Is it sold yet?"

"Don't be absurd, Brown." Codger's voice was scornful. "That is merely for advertising purposes."

"Is that so?" said Mr. Throckmorton in the tone of one who has accepted challenge. His eyes darted over the remaining line of curious customers. Then he rubbed his hands, moving off in the direction of a new victim. . . .

IT took John Brown a little while to get down to the washing machine section, and on arriving there he found bedlam.

John Brown managed to push his way through the jamming aisles. By the time he had reached the group crowded in front of the washing machine department, he was perspiring and out of breath.

Mr. Darnell, of neckties and ribbons, was futilely wringing his hands and fluttering around the fringes of the scene. Mr. Brown grabbed the fellow's arm, drawing him aside from the commotion.

"What's going on here?" he demanded.

Mr. Darnell was decidedly agitated. "It's Brown," he almost squealed. "The little fool, oh the little fool, it's the sec-

ond time today!"

John Brown had to shake the trembling Mr. Darnell to make him continue. "Come, come," he shouted. "What happened?"

"Brown was trying to sell a customer the gigantic washer. He had sold out all the others—guess it went to his head—and he tripped, just like he did this morning. Now Brown and the customer are whirling around inside the machine!"

Time hung motionless as the full import of Darnell's words came crashing in on John Brown—Throckmorton—in his body—was whipping about in the washing machine with a strang customer. Supposing—supposing—Mr. Brown hated to think of it—**SUPPOSING IT HAPPENED ONCE MORE!**

From a distance, Mr. Darnell's terrified voice came to him. "It's awful, sir.

The poor customer and that crazy little salesman. The poor customer, she's —"

"*She*," bellowed John Brown. "Did you say 'she'?"

"Yes, sir," bleated Darnell. "It's a lady customer."

But John Brown hadn't waited to hear the last of Darnell's statement. With a hoarse yell he was up the steps to the platform around the huge washer. His mind was made up. There was only one thing to do.

Mr. Darnell, standing stricken and helpless in front of the excited crowd, caught a glimpse of the expansive bottom and flying coat-tails of his employer as they disappeared into the whirling machine. And as he vanished into the thick of things, Mr. Darnell thought he heard him say:

"Everything comes out in the wash—it always does!"



(Continued from page 4)

Watch for this story, coming in a future issue of **AMAZING STORIES**. It'll be worth waiting for, we promise you.

COMING up soon is a new series of back cover paintings, depicting a scientific conception of the landscapes of other planets. We will carry this series through the whole solar system and many of the larger satellites of the solar system. Scientifically accurate articles concerning these conceptions will also be presented. Your editors feel that this series when completed, will form a very valuable reference.

THE other day David Wright O'Brien dropped into your editor's office and sat down for a little discussion. He advanced several very unusual ideas, and we immediately set him to work finishing them up. His present story in this issue is a sample of what we mean by unusual ideas. Certainly your editor would never have believed a mere wash machine could produce such an amazing and delightful tale as "John Brown's Body",

but O'Brien did it (with the help, incidently, of Wm. P. McGivern, whom we certainly don't want to slight:—a couple of Irishmen are positively not to be slighted :) and we rushed the story into print.

MORE news comes to us from Mark Reinsberg, who is handling the Chicago 1940 Science Fiction Convention. He tells us the big event will take place on September 1, and over the Labor Day holiday. He requests that all fans desiring to attend, write and let him know they are coming. You who want to attend can drop the editors of **AMAZING STORIES** a card and signify that intention. We'll be glad to pass it on.

IN this issue is another of Willy Ley's increasingly popular articles. His previous article on rockets was so well received, and brought so many requests for more on the subject, and especially on the newest phase of rocketry, the war rocket, that he did an article devoted entirely to this subject. We present it in this issue, and we feel that the subject has been thoroughly covered. Your reactions will be appreciated by Mr. Ley.

COMING soon is a front cover painting by Julian S. Krupa, depicting a scene on one of the moons of Jupiter, and its weird inhabitants. We feel that this painting will do much to create a demand for many more Krupa covers. And with that forecast, we'll close up the observatory for this issue. We'll be back in June.

Rap

WAR ROCKETS

By WILLY LEY

So much interest in rockets and their potentialities in modern and future warfare has developed among our readers that the editors of *Amazing Stories* have asked this foremost authority on rocketry in America to give us his views on the matter.

IT was in the Summer of 1909 that interested circles were surprised and somewhat disturbed by rumors that Friedrich Krupp in Essen on the Ruhr, then Central Europe's biggest gun and armament factory, had bought a hundred air torpedoes and a launching rack for them from a Swedish company. Since it was also rumored that Krupp had purchased all the patents pertaining to this invention, there was only one very obvious conclusion within the realm of probabilities: Krupp wanted to perfect those air torpedoes to create a new weapon.

The rumors were true. The inventor, a Swedish lieutenant by the name of Baron von Unge, had actually sold his patents and the Swedish company "Mars" (established apparently only for the purpose of developing von Unge's inventions) had sold whatever Krupp had wanted of finished air torpedoes, working models and other paraphernalia.

About one year later it was announced semi-officially that the further development of the air torpedoes had been given up "due to inherent lack of accuracy." Needless to say, nobody believed that statement. Everybody who knew about it at all expected to see and/or experience the effect of Krupp's air torpedoes in the "next war." But when the next war came, (the World War) nobody ever saw anything that might have been termed an air torpedo. It was finally agreed that the rumors had been untruthful.

The air torpedoes had been rocket torpedoes, short and fairly heavy projectiles propelled by a rocket charge and fired from a small specially designed mortar. Although the initial velocity thus imparted to the rocket shell helped to increase the distance covered, accuracy remained poor. They were found to be much inferior to mortar shells of the same size and weight, and ballistic experts failed to see why von Unge's rocket torpedoes should be introduced as a new weapon.

While the World War did nothing to revive the war rocket that had existed about a century earlier, the Spanish Civil War brought at least one novelty: the propaganda rocket. These propaganda rockets were simply large rockets of the type used

in life-saving apparatus. They carried a light aluminum container filled with propaganda leaflets that were supposed to impress or discourage the soldiers on the other side. When a small explosive charge was detonated by a timing device, the container split open and the leaflets were scattered around a wide area.

It is only natural that people should ask themselves whether war rockets might be brought into existence and into possible prominence in the present war. During the last ten years it was occasionally rumored that this or that country was experimenting with war rockets, but the rumors never appeared sufficiently substantiated. Furthermore, they had the somewhat suspicious habit of referring inevitably to the "other country." In the United States rumors were about Russia and Germany; in Germany about the United States and Russia; and in Russia about Germany and the United States. When, during the first weeks of the present war, Hitler and other German leaders made repeated remarks about a secret weapon, the possibility of war rockets was among the guesses about the nature of this weapon that were made all over the world. It seems Hitler actually referred to the new light mines . . . and they *could* have been purely propaganda.

It is a fact, however, that the talk about war rockets did not occupy space in newspaper Sunday Supplements only, but that it penetrated deeply into scientific and military circles. One of the early 1939 issues of the journal *Army Ordnance* contained an article by James R. Randolph, Major of the Ordnance Reserve, that not only treated the possibility of war rockets in general, but actually recommended or at least encouraged investigation. Rockets do have the appeal of being "the soul of artillery without its body" as Sir William Congreve put it 130 years ago. Nor had Sir William Congreve's famous war rockets, imitated in nearly all European armies at that time, been the first. He himself had become interested in the possibilities of projectile carrying rockets in reading reports from East India that told of a defeat of British colonial troops caused by the war rockets of the Indian Prince Tippoo.

Sahib. And five hundred years even before that time, say from 1300-1400, war rockets had existed in Europe, introduced by the Arabs and advocated mainly by Italian and German military engineers.

The question whether the present war will produce war rockets or not might well be asked in the form: "In what way could rockets be superior to existing known weapons?" Formulated in such a way an answer might be attempted on theoretical grounds.

Those older war rockets had been superior to other weapons of their periods, but not always in the same way, and not always for the same reason. The war rockets of the period from 1300 1400 A.D. (i.e. shortly after rockets were invented) had served as incendiary projectiles. They were then in competition only with "fire-arrows" Even those primitive powder rockets had probably a longer range than an arrow and they certainly had a longer range than a fire arrow that could not be shot with full power of the bow since that would have extinguished the fire the arrow was supposed to carry. But as soon as artillery improved, the fire-bearing rocket became obsolete and was quickly forgotten.

When Sir William Congreve introduced his war rockets—they also were incendiary rockets at first—in 1807, his "new" weapon was again in competition with artillery. Congreve was especially proud of his 32-pound rocket which had a range of 3,000 yards and contained seven pounds of carcass composition. The ten-inch mortar of that time fired bombs with the same amount of carcass composition, but its range was only 2,000 yards and it was "the most ponderous piece of ordnance" (Congreve's words) while the rockets needed only light copper launching tubes. The accuracy of artillery and Congreve rockets were equally good or equally poor, depending on how you look at it. But during the next five decades the range and accuracy of artillery increased much faster than that of rockets with the result that war rockets disappeared.

Baron von Unge's air torpedoes had a weight of about 100 pounds and a range of between 3,500 and 4,000 yards, by no means enough to impress ballistic experts of the beginning 20th Century. But Baron von Unge, who was also interested in aviation and was in some measure connected with the construction of the two Swedish airships, *Svenska I* and *Svenska II*, had a novel idea. He soon realized that he would not be able to compete with artillery on the ground, and replacing his small mortar with a light launching tube he advocated his air torpedoes as the weapon of aircraft, for fighting in the air as well as for attacking ground troops. It was his idea that interested Krupp, but it seems it was only a nice idea that could not be realized in practice, at least not at that time.

There is no need to assert that guns have progressed since von Unge's design was shelved in 1910. But rockets progressed, too; in fact, they progressed more, by comparison. There existed no

rocket theory at all in 1910 but it does exist now. It is now theoretically possible to design liquid fuel rockets for any desired altitude and it is also fairly well known how experimental research would have to proceed to put these designs into practice.

Basically there exist three different possibilities of military application of high velocity rockets. Since the movement of rockets is independent of the surrounding air, they are capable of reaching higher altitudes than any type of aircraft. Does that mean that rockets might be used in lieu of anti-aircraft guns? As far as shooting at enemy aircraft is concerned it does not mean that rockets could be superior. The higher altitude would be the only advantage. The accuracy would be poor indeed if compared with modern anti-aircraft guns and the firing speed would be less too. And since anti-aircraft guns can send their projectiles to higher altitudes than the ceiling of existing aircraft (save for stratosphere balloons) there is no need to introduce rockets.

Rockets *might* do, though, for shooting anti-aircraft barrage. A Russian inventor has been credited with the idea of rockets carrying thermite bombs suspended by parachute so that the enemy airplanes would have to cross a trickling rain of liquid fire. While this rain might be destructive to the airplanes, it would certainly cause more damage to the ground. A new type of projectile about which some information has been released recently (designed by an American inventor), contains a parachute that is ejected at the peak of the flight and thereby pulls several hundred feet of steel tape from the long jacket of the shell. That length of steel tape is supposed to entangle the propellers of enemy aircraft and it is said that the method has been found to work to the full satisfaction of the inventor. Shells of that type, where accurate aim is not necessary, could be carried up by rockets and in that case rockets would permit larger volleys.

When I said that anti aircraft guns could fire more rapidly than rockets, I was referring to accurate shooting per gun or per launching rack. Even for the shooting of an aerial barrage, where accuracy is of secondary importance, each gun could manage to throw more shells into the air than each launching rack could release rockets. But the price of one gun would pay for several hundred launching racks so that the latter could be concentrated to an unbelievable degree which would result in fewer but very heavy volleys.

It is, incidentally, the latter feature that especially intrigued Major Randolph when he wrote the article mentioned. He also thought of very heavy volleys, although not for barrage purposes.

The two other theoretical possibilities for the military application of rockets are either to throw a comparatively light shell over a very long distance or a very heavy shell over a short distance. War rockets could be either "Super Long Range Guns" or "Super Mine Throwers" and it seems that military experts have already decided that only the latter use would be worthwhile.

It is said that the bombardment of Paris by the German long range guns in 1918 caused close to a million Parisians to flee the city. But under present conditions, with cities already partly evacuated and actually and mentally prepared for much heavier bombardments from airplanes the moral effects of a few long range guns or long range rockets would probably not be very great. And the actual effects of the bombardment would depend simply on good luck since actual aiming over such a distance simply does not exist. The German 80-mile gun had a lack of accuracy that amounted to almost ten per cent of the range and long range rockets would not be any better, especially since the idea of wireless control might safely be given up for a very long time.

Although Major Randolph did not use that term in his article in Army Ordnance he thought mainly of the possibility of Super Mine Throwers. After discussing the theory of rocket motion and mentioning some of Dr. Goddard's experimental researches he decided that a rocket carrying the equivalent of a 24-inch shell would be a nice thing to have. "When a fortified position is to be reduced by cannon," he wrote, the bombardment often lasts for several days, giving the enemy ample time to bring up reinforcements. With rockets the whole artillery preparation would probably be shot off at once or in several volleys." This sounds, of course, very formidable, but it is somewhat optimistic. Military experts are in favor of powder rockets and like to see the lessons learned with liquid fuel rockets adapted and applied to powder rockets because the latter can be stored in the charged state, ready to be fired,

while liquid fuel rockets have to be fueled shortly before they are used. The largest powder rockets in existence might be able to carry a 24-inch shell over a distance of one mile. That is a very long way from the desired 24-inch shells that would have to fly about ten miles. And even those existing large powder rockets are fairly dangerous to those that use them (rough handling in packing and shipping makes them explode when they are being ignited) and pyrotechnic experts would also shun the danger connected with compressing larger quantities of powder.

The solution of the problem will probably consist in the design of a mechanism that is able to handle large quantities of highly compressed small powder pellets (weighing, say, three ounces each) in a very short time. Assuming the successful use of smokeless powder for a driving charge, a ten mile rocket will require a propelling charge weighing roughly $1\frac{1}{2}$ times as much as the rocket itself and the projectile it is to carry. Both these problems are by no means insoluble, but will require much experimental research. It is important to remember, however, that even a successful design would be of military value only if used in large quantities. Then heavy war rockets may repay the expenditure of money and energy that would go into their development.

But aside from rapid fire assaults on limited areas, war rockets will never replace artillery. It is also well to remember that military aviation has meanwhile attained the goal Sir William Congreve dreamed about for his 32-pound rockets of war. Modern long range bombers actually are "the soul of artillery without its body."

X-RAY PICTURES STOP AIRPLANE SABOTAGE!

One of the most recent and spectacular assignments handed to photography is the role of sentinel guarding against the insidious, unseen workings of saboteurs! Airplane imperfections, planned or accidental, which eventually might plunge flyers to their deaths, cannot escape detection! Here is counter espionage work in the modern manner! Don't fail to read how X-ray photography defeats the plans of saboteurs at every turn. You'll find this informative, brilliantly illustrated article on page 14 of the

★ APRIL ISSUE ★

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HOK DRAWS THE BOW

(Concluded from page 111)

That night they made their beds on the sand of the fire-purged beach. Nothing but ashes remained of the enemy camp, and the day of heat had cleared the air of Gnorrl-scent. Far away to the north, the dark sky was lurid with the still-marching flames.

"How many Gnorrls came alive out of that business?" wondered Oloana.

"Few, very few," answered Hok. "There are, of course, scouting parties south of here. We will avoid them on the way back, and lead warriors to surprise and swallow them. I doubt if the Gnorrls will have the numbers or courage to look us in the face for many years. And then we will have our bows."

"And we have our home again," rejoiced Oloana, like the good housewife she was. "A few hours will rebuild the huts—and people from the south will strengthen our numbers more than ever—"

She broke off and gazed anxiously at her husband. "Hok!" she cried. "What is the matter?"

For he, chief and champion and conqueror, sat with his bearded face in his big hands. He shed the first tears his eyes had known since childhood. His body shook with great, racking sobs.

"Oh, the young men of our people who have died because Romm would be worshipped by the beast-people!" he mourned brokenly. "Oh, my two young brothers, Barp and Unn—and the brothers of all the rest, brave men, good men, who live no more! How can all the hunters of all the southern forests ever fill their places?"

WAR IN THE AIR!

The conflicts in Europe may be a continuation of the "war of nerves" . . . cunning pitted against cunning . . . blockade against counter-blockade . . . but the war in the air goes right back to the point where the First World War left off—a fight for supremacy in design, which means supremacy in performance! This is the opinion of Major Alexander P. deSeversky, famous World War veteran. Don't fail to read his informative, unbiased account of today's war in the air. Turn to page 18 of the

★ *April Issue* ★
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Meet the Authors

MANLY WADE WELLMAN
HOK DRAWS THE BOW

Author of

I CANNOT guarantee that this account of my own life will be either comprehensive or interesting. It could be, but then it would be confessional rather than autobiographical. About me, as about most human beings, the best stories go untold.

Every individual, says the philosopher, is an omnibus in which rides the great and varied company of his ancestors. Let us stop and examine the passengers my own personality conveys. They are English, Scotch, Gascon French, German Swiss . . . a proud lot, expert searchers for trouble, often mistaken but never in doubt. I count among them one good artist, two good novelists, three good doctors, several Confederate officers, and one Yankee cavalryman; an Episcopal bishop, and many sinners; a Napoleonic guardsman, who was on the retreat from Moscow and saw his emperor plain, asking for roast potatoes. Before these, in the pre-colonial days, I count Jacobites and Whigs, Lancastrians and Yorkists, Saxons and Normans — my ancestors fought so much among themselves that I wonder how they ever managed to collaborate in the enterprise that eventually introduced me.

And, of course, far back behind and before all these, there once strode and swaggered a big, bearded hunter, clad in skins and wielding flint axe and spear—my Stone Age forebear, who I hope was a gentleman and a fair fighter. For all he did not know how to read or write or hold a teacup, I do know that he still stirs appreciatively in the aforesaid ancestral omnibus whenever I set down on paper how Hok the Mighty (my idealization of that far-gone grand-

father) invades new wonders, or spits between hand and haft to get a firmer grip of his weapon. . . .

And I am the descendant of these. Do they approve of me, I wonder? Despite my family's pre-Revolutionary roots in America, it fell out that I was born abroad—deep in the interior of Angola, Portugal's West African colony, where my parents sojourned a good thirty years ago. There I was reared, in a way to enchant any child—the country may not be the most beautiful on Earth,

but I never saw its equal. The people were magnificent, and left me with the love for good savages that must creep out when I write about Hok's tribe. I grew up to boyhood speaking Umbundu better than English — perhaps I don't speak English well as yet.

But to America I came, lest I become a sort of savage myself (I wish I had!); to school in Washington, Kansas, Utah, Minnesota, New York; to work in many interesting and toilsome fields, in more states than those. I like soldiering least, and film reviewing best. Between times I wrote, and have done my most successful work in fantasy and science fiction, in which allied fields I have produced and published something like two hundred stories.

As I stand today, I am mountainous in size, dark in complexion, unkempt in appearance, retiring in disposition. I live on the

side of a New Jersey hill, a furlong from the road, and I wish I were even more withdrawn than that. With me live the following individuals, all enduring and understanding comrades; my wife, who also writes fantasy as Frances Garfield; my son, Wade; and my Persian cat, Michael. Hobbies? I have few—no busy writer has time for much except writing. But I once boxed and wrestled, I still take time for hiking, fencing and badminton in season. — *Manly Wade Wellman.*



Manly Wade Wellman

Science Quiz

The following quiz has been prepared as a pleasant means of testing your knowledge of things scientific and pseudo-scientific. We offer it solely for the pleasure it gives you and with the hope that it will provide you with many bits of information that will help you to enjoy the stories in this magazine. If you rate 50% correct in your answers, you are considerably ahead of the average. Give yourself $3\frac{1}{3}$ points for each correct answer.

A MATTER OF CHOICE

1—In order to see the cells of a plant more clearly through a microscope it is best to dye them with (1) lampblack, (2) bluestone, (3) cosin, (4) sulphur.

2—Water is known as the (1) universal solvent, (2) dehydrating solvent, (3) non-existent solvent, (4) international solvent.

3—A pneumatometer is an instrument used for (1) measuring the force exerted by the lungs in respiration, (2) finding the diameter of stars, (3) measuring the flexibility of recently-made automobile tires, (4) detecting impurities in foods.

4—We live in the (1) stratosphere, (2) hemisphere, (3) bathysphere, (4) troposphere.

5—When you toast bread you change the starch to (1) sodium, (2) dextrin, (3) mineral matter, (4) chlorophyll.

6—The most important element used in the vulcanizing process is (1) sulphur, (2) aluminum, (3) mercury, (4) nickel.

7—The plural of spectrum is (1) spectral, (2) spectrac, (3) spectra, (4) spectrissimo.

8—A rising barometer indicates (1) stormy weather, (2) fair weather, (3) unchanging weather, (4) an earthquake.

9—In Mexico there are more (1) pyramids, (2) Egyptians, (3) artesian wells, (4) deserts, than in Egypt.

10—Barium compounds are used (1) to make X rays effective, (2) in medicine, (3) in bleaching, (4) in the making of certain metals.

11—When we cross the International Date Line going eastward (1) today is yesterday, (2) yesterday is today, (3) tomorrow is today, (4) tomorrow is yesterday.

12—When we cross the International Date Line going westward (1) today is yesterday, (2) yesterday is today, (3) tomorrow is today, (4) tomorrow is yesterday.

13—Ptolemy argued that (1) the Pythagorean theorem does not pertain to all right angle triangles, (2) it is possible to square the circle, (3) if the earth were moving, birds and other flying

things would be left behind, (4) phlogiston did not exist.

14—The food reaches the stomach by a series of slow-moving muscular contractions. This wave-like movement is known as (1) peristalsis, (2) undulation, (3) motor axon, (4) osmosis.

15—The converting of digested food into living matter is known as (1) euthenics, (2) emulsion, (3) assimilation, (4) imbibition.

TRUE AND FALSE

1—In broadcasting television sight and sound programs, the sound is always on a higher frequency than the image. True False

2—When two live D.C. leads are placed into water, bubbles will rise from the positive lead. True False

3—When the moon is crescent in her first quarter, the convex edge is to the observer's left. True False

4—Multiplication, addition and subtraction can be performed on a slide rule. True False

5—It is possible to travel from the east coast of the United States to the west coast by water alone. True False

6—The louder the sound the greater its velocity. True False

7—Oxygen is to man as carbon dioxide is to plants. True False

8—We have eclipses of the sun when the moon is new and we have eclipses of the moon when it is full. True False

9—If a tin of liquid air was placed on a cake of ice, the liquid air would boil. True False

10—Fresh water weighs more than ocean water. True False

I.Q. TEST

There is something wrong in the statements below. Can you tell where the mistakes are?

1—The owl awoke from his sleep, rolled his eyes, flapped his wings and screeched loudly.

2—They all stood in the evening light watching the new moon rise.

3—In order to be sure your problem in trisecting the angle is absolutely correct, it is best to check your result with the book.

4—With an ear-rending howl, the giraffe leaped at its prey.

5—The porcupine, when in a tight situation, can easily defend himself by shooting his quills from his back.

(Answers on page 146)

"C'MERE AND GET SOCKED!"

"What the hell?" squawked Kelly, purple with rage. He jumped at the ball, waving his club menacingly, swinging back and forth madly! The ball twisted and flew over toward third base, swung around behind the pitcher and danced into the outfield, zig-zagged back into the infield, corkscrewed, jitterbugged, cavorted, whirled up and down . . . did everything except approach the plate!

"C'mere and get socked!" howled Kelly. The ball obliged by flashing temptingly close to him . . . then off down the first base line it flew! Kelly shouted and ran in hot pursuit. Around first and toward second it sailed, with Kelly right behind, yelling and shaking his bat! "Stop and let me swat ya!" he bellowed.



On all sides, spectators and sports writers and big league scouts were swarming down on to the field! The game was completely forgotten. All anyone cared about was that amazing ball Lefty Lopez threw and its fantastic duel with Kelly! All we care about is that you don't miss "THE WIZARD OF BASEBALL" . . . one of the most unique and entertaining stories ever presented in FANTASTIC ADVENTURES!

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MAY ISSUE On Sale March 20th!

QUESTIONS — and — ANSWERS

This department will be conducted each month as a source of information for our readers. Address your letters to Question and Answer Department, AMAZING STORIES, 608 S. Dearborn St., Chicago, Ill.

Q. The robot is one of the most popular characters in science fiction. How was he originally conceived, anyway? — Norman Kent, New York City.

A. The term "robot" from the Czech *robit*—work—didn't become popular until 1923, with the staging of R. U. R.—Rossum's Universal Robots—by the late great Czechoslovakian playwright, Karel Capek. Capek's robots were mechanical workers able to do any kind of mental or physical effort.

* * *

Q. Why is curare, the favorite poison of many detective writers, so deadly in nature? Leo Strong, Hollywood, Calif.

A. Curare is the extract of the *Strychnos* genus of certain South American trees. Jungle Indians dip their blowgun darts into the juice, and when the fatal little arrows strike into human flesh, poison is introduced into the blood and respiratory paralysis is the final result.

* * *

Q. Swedish iron ores are now a valuable pawn in European power politics. Why? What makes them so coveted?—Herbert Morgan, Chicago, Ill.

A. Because of their very high content of pure iron—60 to 70% in the Lappland mines, which are worked principally for export. Swedish steel is unsurpassed for munitions manufacture. The Bo-fors anti-aircraft guns are said by military experts to be the world's best.

* * *

Q. Everybody talks about the weather, but nobody does anything about it. Well, who "invented" the weather in the first place?—Will Mundy, Atlantic City, N. J.

A. Believe it or not—Aristotle! The first established attempt at systematic discussion of weather was Aristotle's *Meteorologica*. The great Greek philosopher lived from 384 to 322 B. C., and the weather's been talked about ever since.

* * *

Q. Rocket ships continue to remain a subject of much conjecture. Just how fast can man travel nowadays, anyway?—Mark Harris, Cleveland, O.

A. The greatest speed ever attained by man was reached by Fritz Wendel of Germany on April 26, 1939. Piloting a souped-up clipped wing Messerschmitt fighter, he chalked up 469.22 m.p.h. maximum over a 3-kilometer course.

* * *

Q. The subject of methylene blue came up the other day, and nobody seemed to know much about it—including me! So am turning the question over to AMAZING STORIES—Harold Holt, Boise, Idaho.

A. Methylene blue is an aniline dye, and is

used principally as a stain for pathological and normal tissues and for specimens of blood.

* * *

Q. What is the range of the human ear?—Dave Fifer, Washington, D. C.

A. The human ear is really a marvelous thing because of its great range of frequency and sensitivity. The ear is able to detect vibrations of frequency which may vary from 20 to 30,000 cycles per second.

* * *

Q. What makes paint luminescent? I've been using luminous paint for some stage settings, and I'd like to know what it's composed of.

A. After exposure to light, the commercial sulphides of calcium, barium and strontium become luminous in the dark, hence are used in the making of luminous paints.

* * *

Q. I ran across the term "paravane" the other day in reading about sea warfare during the first World War. How does this instrument operate?—Art Harris, Becket, Mass.

A. The paravane is a type of underwater "kite" developed by Lieut. Commander C. D. Burney, R.N. (Royal Navy), Ret., to combat submarines and mines. In appearance it looks like a bomb with wings. It is towed from a ship by a wire.

* * *

Q. Is there actually such a thing as a strawberry tree? I thought the berries grew on bushes. Hal Dodson, Oakland, Calif.

A. Absolutely. The strawberry tree is a beautiful ornamental tree of the heath family. It is native to southern Europe and also to Killarney, in southwestern Ireland.

* * *

Q. What are the major types of mines used in sea war today?—J. A. Anthony, Winston-Salem, N. C.

A. Controlled mines and non-controlled mines. In the former, the explosion is set off from a shore station through an electric cable connection. These mines are quite harmless—when the current is switched off. The latter type are self-detonating when bumped by ships of any kind, hence are a danger to friend and foe alike. The magnetic mine is also supposed to be in use today attracted magnetically to a ship's steel plates. Some think it a hoax. However, it does not actually rise to the plates of a ship. This is a false belief. It is activated by a magnetic needle, which points north, therefore in a horizontal position. Thus, when a ship passes overhead, the metal ship attracts the needle and causes it to swing up to a vertical position, making a contact that explodes the bomb.

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DISCUSSIONS



AMAZING STORIES will publish in each issue a selection of letters from readers. Everybody is welcome to contribute. Bouquets and brick-bats will have an equal chance. Inter-reader correspondence and controversy will be encouraged through this department. Get in with the gang and have your say.

Sirs:

This is my first letter to any magazine, science or otherwise. What prompted me to write more than anything else is the article "What's Wrong with Rockets?" Mr. Ley has set fire to an idea in my rocket motors.

He points out that the progress of rocket science is halted although they were actually successful in experiments, because money is as scarce as hen's teeth on the moon.

Here's my idea and let's hear something from somebody about it. Why not start a club; call it "The Rocket Club", or what have you. Entry to this club to cost \$3.00 or slightly more, this to be turned over to Mr. Ley for rocket experiment. I may be all wet but I feel sure that the good old U.S.A. has hundreds—nay thousands of modern or future minded younger people like myself who are anxious to see rockets perfected, the sooner the better. I know I would be more than willing to kick in such an amount for that purpose.

CLARENCE C. HUNT,
Bainbridge Rd.,
Chagrin Falls, O.

This would be very nice if it could be done, but somehow, your editors doubt very much if there ARE thousands of fans who would do as you want to do. However, the following letter, by a very familiar fan, offers another suggestion on this same question, which you might follow if you desire.—Ed.

TWO MINDS . . .!!

Sirs:

My immediate reaction to Willy Ley's explanation of "What's Wrong with Rockets?" in your March issue is one of wonder mixed perhaps with a sense of shame. Says Ley, it appears there are not 30,000 persons on this planet at the present time sufficiently concerned with the assault on the infinite to contribute a mere \$3 a year to its realization. There are 30,000 readers of this magazine, surely! Well, what are they waiting for—the Martians to come to earth? Do you mean to tell me the majority is not thrilled by the possibilities of the conquest of space? Has not the "inter-planetary yarn" always been the most popular theme in sciencefiction? Couldn't you and you and you do without a few packs of ciggies a year, cut down on a few football games or dances or

make some small sacrifice to advance astronautics, most significant of sciences? How's about us of the great "imagi-nation" providing the catalyst (cash, to you) that'll speed up space-flight? Think of "Things to Come"! Personally, I want to read those mile-high headlines: **ROCKET REACHES MOON!** before I die. Wouldn't it be a wonderful thing if we science-fiction followers could bring about this dream? I deem it not only our privilege but our duty to participate. Let's make that moon trip come true! The address of the American Rocket Society is Rm. 382, 50 Church St., N.Y.C.

FORREST J. ACKERMAN,
236½ N. New Hampshire,
Hollywood, Calif.

PERFECTLY

Sirs:

I believe that I liked "The Scientific Pioneer" the best of any of the stories in the March issue, because of the really clever sayings and wordings, not an overabundance of scientific facts, and a veritably fine plot.

I was not going to write you a very wordy and lengthy letter, but decided the above lines would convey my feelings PERFECTLY.

GEO. W. O'SHAUGHNESSY, JR.

PLAUSIBLE SCIENCE

Sirs:

"The Strange Voyage of Dr. Penwing" is the best story in the March issue of AMAZING STORIES because it is written in a light, rather humorous vein and yet expounds a very interesting, unusual but plausible scientific theory.

SONYA ARDELL,
1128 N.W. 7th St.,
Miami, Fla.

RE: AMAZING STORIES

Sirs:

Re: AMAZING STORIES for March, 1940:

Cover—Compelling, artistic! More by McCauley!

Black World—Makes Red Peri just another story!

Strange Voyage of Dr. Penwing—Lewis is one of my favorites; this is his best despite scientific errors!

Paul Revere and the Time Machine—What a

story! What suspense! All right, then, what suspense?

Vagabonds of the Void—Reminded me of "Grapes of Wrath," although not quite so well written.

Scientific Pioneer—Swell! Perfect! How does Bond keep it up? He must use a dictaphone, if the speed and action of his stuff means anything!

Terror out of the Past—Sounded slightly familiar in plot, BUT Gallun made me like it!

Illustrations—Perfect! Fair! Rotten! More just like them, please!

Don't fail to read my next missive! What will I think of the April issue? What will I say? Will I still think Steber greater than Weinbaum? For the most exciting and humorous commentary of the year, don't miss my next letter! It'll be the smash letter of your editorship!

What do you mean, Carl Selwyn will be one of the finest science-fiction writers? You err. That is my destiny!

KENNETH HARRISON,
72 Laurel St.,
Ashland, Ore.

You certainly are a pithy sort of fellow! But do we detect a hint of sarcasm in some of your comments? When you mention illustrations, just which ones do you consider "rotten"? Let's have more definite information, so we can avoid that kind of comment. And obviously (or is it?) you don't think some of our stories have suspense. Now, if you mean your letters when you speak of your literary destiny, may this editor "edit" your letter, and take out that question mark after "what suspense"? We don't know whether you think the story had "what suspense!" or "what suspense?" So, when you send that next letter, you'd better "clarify," my lad! But thanks for the raves! You aren't the only one who likes "Black World."—Ed.

WE KNEW PENWING WOULD CAUSE COMMENT!

Sirs:

I wish to commend you on Lewis' unusual "The Strange Voyage of Dr. Penwing." It was a very intriguing story, cleverly written and it offered a most unusual theory which will, no doubt, cause considerable fuss among the readers.

Much as I liked it, I feel it my duty to try to smash Dr. Penwing's theory to sub-atomic shreds as I do not relish the idea of being cooped up on the inside of a sphere with a lot of curved light playing tricks on me, so here goes!

After giving it deep consideration, I decided that Dr. Penwing has a cracked plug somewhere because, if we were living on the inside of the earth, as his theory states, the famous 75 mile gun that the Germans used during the first world war would have failed miserably.*

Think it out for yourself; since 1492 or thereabouts, it has been quite certain that we are living on the outside of a sphere. Naturally, when the

* Geometrically the 75 mile gun did not fail as it did deliver shells into Paris. As far as war purposes go, however, "Big Bertha" was quite a washout.—Ed.



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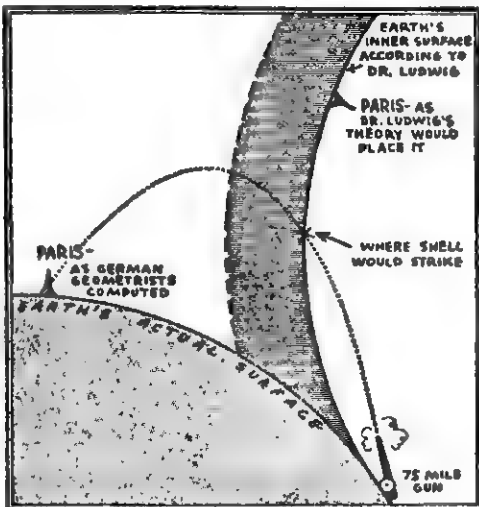
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geometrists figured the trajectory of the 75 mile gun, they took into consideration that the earth curved away from them convexly. Now, were Penwing's theory true and we really were living



on the inner surface of a sphere, the shell would have struck in some wheat field miles short of Paris as can be shown by the diagram herewith.

JEFF GLEASON,
900 W 41st St.,
Los Angeles, Calif.

Here's a reader who has submitted a diagram (reproduced on this page) to prove that Penwing (and Lewis) was wrong! Now, we could have rejected the Lewis story because of science faults, but we didn't, because we knew it would be liked, and it was. And it gave you readers a chance to PROVE you know your stuff! Thanks to all of you for your many letters about this yarn. We are sorry we can't print them all.—Ed.

AUTHOR GADE ATTACKED

Sirs:

I'd like to know where Mr. Gade got all that phoney information on cosmic rays. He states that if the full force of cosmic rays would strike the earth the course of evolution would be turned back two hundred million years. I won't say it couldn't happen, but there's no proof to back up this theory. Science admits that at the present there's no evidence that cosmic rays are injurious to humans. Some scientists even claim that the rays are essential to life. During each second of your life ten of these cosmic bullets pass through your body. Mr. Gade puts the number of rays a second at thirty. His claim that the rays can penetrate thirty feet of lead when they can actually penetrate seventy-five feet proves that he doesn't know much about cosmic rays.

I got my information from an expert: Dr. W. F. G. Swann, Director of the Bartol Research Foundation of the Franklin Institute, Philadelphia.

If the magnetic field of the earth would fail cosmic rays would be our least worry. Wouldn't gravity also fail? I believe it would. If this would happen the atmosphere would escape into space

and what would stop the earth from flying to pieces?

Mr. Gade also shatters the hopes of scientists who claim that some day man will conquer space. According to him, as soon as a space ship reaches open space it will be exposed to the full force of cosmic radiation, which he claims will have disastrous effects.

I think it's about time some of us readers point out the terrible mistakes made by some of these authors. For this reason I would like to see this letter published.

CHARLES W. ECKERT,
R. F. D. No. 1, Box 220,
Sellersville, Pa.

Your comments on cosmic rays are certainly interesting, and we pass them on to our readers as you request. However, we are going to stick in our editorial "oar" and make a few comments of our own on the rest of your letter. We don't think your theory of the failure of gravity in the event of magnetic field failure can be so easily backed up. Scientists still don't know what "gravity" really is, and I'd hate to back you up on that statement, and especially on the atmosphere escaping and the earth flying to pieces. So maybe Mr. Gade might come right back at you and tell you you don't know much about magnetic fields, or rather, that you ascribe too much to them? As for shattering all hopes of interplanetary travel, aren't you indulging in a little wishful thinking there? Just because there MIGHT be some insurmountable obstacle to something we want, aren't we being just a bit unscientific in refusing to consider it? So, perhaps Mr. Gade hasn't made such a terrible mistake in pointing out that there MIGHT be danger from unknown rays, and that it ought to be considered? It would be embarrassing to the first space pioneers to discover, as they died, that they should have taken the unknown into consideration, and tested with animals first, before risking their own lives.—Ed.

THANKS—AND THE SAME TO YOU

Sirs:

These few words are to express my appreciation for the entertainment and the whiling away of weary hours.

May I thank you for this service. May I wish you all good blessings in the New Year.

FATHER McCaffery, S.T.L., M.A.,
Mount Mercy,
Junior College and Academy,
Elmhurst Dr.,
Cedar Rapids, Iowa.

ROMANCE—HISTORY—ADVENTURE

Sirs:

Your story, "Sons of the Deluge" hit the spot with me. The story doesn't seem a bit fantastic. It's got just enough romance in it to give it spice; just enough history in it to make it seem authentic; and just enough blood and thunder in it to make it appealing to a man. My hat's off to you and Mr. Bond.

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NO, ADAM LINK ISN'T THROUGH

Sirs:

I was surprised to find the art work in the March AMAZING STORIES better than usual. The science-fiction questions on your quiz page were interesting—more of these in the future, if you don't mind.

The stories in the mag first mentioned were pretty good, too. I liked the Bond contribution, myself, but "Terror out of the Past" ran a close second. I don't know why I didn't place the Lewis yarn higher; I usually like this sort of story. But it just didn't seem to suit me. "Black World" looks promising, though I suppose any inter-planetary tale would, after being so consistently earth-bound lately, except for the Lancelot Biggs duo, of course. Ley's article was exceptionally fine. One good, long article, by a good author, would be the equal of any number of your current features. Try to give us one every month.

Honestly, I don't know whether to be glad or sorry that the Adam Link series is over—if it is over. These yarns were fine, at the start, but they soon began to show the effects of the Binder team's mass production methods.

In parting, let me say that I was surprised that you published my first letter. Now, I will probably become a regular correspondent. Oh yes, one thing more. The thing AMAZING STORIES needs most right now is trimmed edges. This would improve the make-up of your mag one hundred per cent. It seems to me your format is one of your weakest points at present. How about putting it to reader vote, anyhow?

TOM ELLINGTON,
 1230 Greenridge Rd.,
 Jacksonville, Fla.

Next month we are going to run a questionnaire, and we'll ask that trimmed edges question as part of it. We won't promise anything, because once before we asked it, and didn't get the response needed.—Ed.

ANOTHER "TOPS" ISSUE

Sirs:

"Black World" is, of course, the leading number in the March issue of AMAZING STORIES. Steber has created two very real people here who will be long remembered. The first part of this smash serial is full of mystery and human interest. The characters keep you guessing. Another point is that the plot is not translucent. You are in suspense. I hope, and firmly believe, that the last instalment will be even better than the first.

I received a peculiar kick out of "The Scientific Pioneer." Bond has here a quaint little story of a remarkably logical man. The turnips offer a good side laugh. It's a good yarn. More like it, please. The cover was swell, as well as the interior illustrations. Keep it up.

Thanks for another "tops" issue.

EDWARD ROBINSON,
 St. Paul's School,
 Concord, N. H.

Mr. Bond is bringing "Horsesense Hank" back again in the near future, with another problem. So many readers requested it that we immediately

telegraphed Mr. Bond, and we can assure you Hank will be recalled from his turnip patch.—Ed.

JUST A PLUG

Sirs:

I have just finished the latest issue of AMAZING STORIES and find, for the first time in several months, that you have turned out a good magazine.

Starting with the cover it is much better than you've had for sometime. The back cover was also very good, and the theory was plausible.

Your best story in this issue was either "Terror out of the Past" or "Black World." They were both excellent and I can't make up my mind which is better. However, "Black World" is very much like "The Three Planetes," the pirate girl and all that. In next place I liked "The Scientific Pioneer" with "Paul Revere and the Time Machine," "Vagabonds of the Void" and the others staggering along behind. However, I don't see why they destroyed the time machine.

A few months ago you published an issue containing "History in Reverse." At the end of the story you had a footnote stating that some Englishman discovered a glass globe 50,000 years old. Was that true, or was it just a plug?

JIM ADAMS,
141 S. Monroe Ave.,
Los Angeles, Calif.

Sorry to disillusion you, but it WAS just a plug. But it wasn't a bad one, eh? It certainly lent credence to the yarn.—Ed.

BALANCED ISSUE

Sirs:

The March issue of AMAZING STORIES, though it contained an overabundance of humor for science-fiction, was one of the most balanced issues in a long time. You try to give us readers the best science-fiction, the March issue had it. My rating of the stories is as follows:

1. Black World (Part I)
2. Terror Out of the Past
3. Vagabonds of the Void
4. Paul Revere and the Time Machine
5. The Strange Voyage of Dr. Penwing
6. The Scientific Pioneer

"Black World" is undoubtedly the best, since all its action was perfectly timed. The remaining five stories follow each other by a hair's breadth. I can honestly say: "Not one of the yarns did I dislike in the least. I gave 'The Scientific Pioneer' the rating of sixth, yet I could take five stories that you've published in the past year and still rate this Nelson S. Bond story over them all."

I hear Frank R. Paul is working on a front cover and I hope the report is true. In comparing so many artists, I find Paul to be tops, har-ring none. His covers are something to look forward to. I might even say his sketches for inside illustrations are also tops.

HAROLD SCHAEFFER,
1320 Fulton Ave.,
New York City.

You'll find Paul in this issue with a couple of illustrations. And the report of a front cover is true. He'll be with us more than once with covers in the coming year.—Ed.

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HE'S SUNK!

Sirs:

I have just finished your March issue. I want to thank you with all my heart for the rocket article, it is just what I have been hoping for as I am an amateur rocket fan and there are all too few rocket articles. Now for the stories. Another surprise! Usually there is at least one story I can crab about but in this issue I am sunk, not even one! My gosh, editor, can you be so cruel?

The front cover was pretty good, but I don't like the six-gun idea. After all, if we had space flight, wouldn't we have more advanced weapons? The back cover was the only lemon in the issue, but boy was it sour! How about some stories from Williamson, Taine, Smith, Kuttner, and Simak? In my estimation these are the leading authors of S-F and never have I seen one of their stories in AMAZING. Your best artist is Morey with Krupa second, but why not try that aristocrat of S-F illustrating, Wesso? He, in my view, is the best of them all.

ERIC ROLAFF,
Moon Valley Farm,
Flat, Mo.

HE'S "UNSQUASHABLE"

Sirs:

I'm torn between two desires one, to rate "Adam Link's Vengeance" as tops in the February issue of AMAZING STORIES, or two, to let go and give the glad hand to "The Thirteenth Mr Tumps" Maybe the Mr. Tumps should get my A-1 since it won me back to AMAZING STORIES after an absence of well nigh ten years.

But, let me explain—I am an unsquashable news stand browser (almost a fixture at my favorite shop) and the proprietor lets me putter about and glance in all and sundry without even muttering if I don't buy a book. However, when the February issue of AMAZING STORIES hit the stand, a hurried glance and a skim through the Mr. Tumps story found me more or less unconsciously handing over two dimes to the amazed dealer. I really don't know who was more surprised, the dealer or myself, for I haven't bought science-fiction from him since the Lord made little apples sour.

Then, I read the Adam Link story and off I scooted to the second-hand magazine store to buy up all the old issues.

RAN TERSEN,
Carberry House, Suite No. 3,
1419 Forst St.,
Victoria, B. C.

JACKPOT FOR McCAULEY

Sirs:

Just a line to applaud McCauley's splendid cover on this latest issue of AMAZING. The picture of the man and the robot, as coverized, is nothing less than "smooth." It is neotric, streamlined and easy on the eye. There are no conflicting hunks of superfluous color and line in it as in most other covers of the past few years. This is the first really artistic cover you've had. The others were cartoons, and bad ones—especially that one the other month illustrating Binder's robot Utterly horrible! But this time you've hit the ultra swell jackpot.

There were two reasons for my buying this issue—the cover and the story by Nelson Bond Please more covers like this one.

RAY BRADBURY,
405½ W. Twelfth St.,
Los Angeles, Calif.

WE ARE PIONEERS

Sirs:

So far Ziff Davis' AMAZING STORIES has made every other science fiction "rag" look sick. First, it used good size type, and it eliminated ads on the back covers, for there are ads on the radio, in the papers, in slick "rags," signboards, neon signs, sky writing, sound cars, and now even in the movies, which gets very tiresome!

But, don't misunderstand, I am not against advertising. However, a continuous barrage of it in every conceivable way is discouraging, and sickening!

AMAZING next led the field by featuring cartoons. In other words, AMAZING STORIES is about "tops"

GLENN W. ROBERTS,
4427 N. Parkside Ave.,
Chicago, Ill.

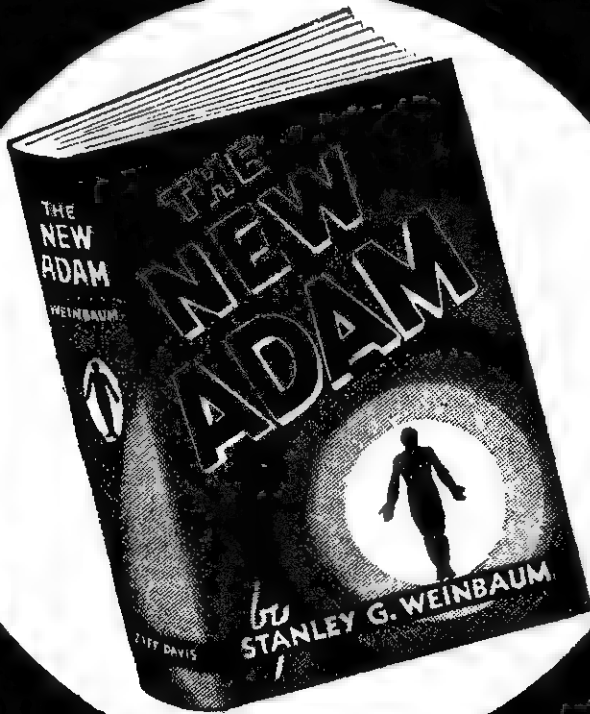
CLOSER TO FACTS

Sirs:

As my "top" story for March issue of AMAZING STORIES, I select A W Bernal's "Paul Revere and the Time Machine"

It is a yarn possessing a peculiar constructive style which does not follow your usual story developments. Nevertheless, it rates "tops" in character, development and plot. Its relationship to actual history places it one step closer to facts rather than fiction.

JOHN KERCHEFSKY, JR.,
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12,000 YEARS AGO

By HENRY GADE

(See back cover painting by H. R. Hammond)

► **All over the world there are legends of ancient races, stories of continents where oceans now roll. Atlantis and Lemuria, both mighty nations, are said to have existed in the Atlantic and the Pacific. Artist Hammond has pictured his conception of Lemuria 12,000 years ago** ◀

CHURCHWARD, in his books, has rather completely covered the legend of Lemuria, and pointed out all the known ruins and relics of this ancient civilization. Perhaps most widely known of all these ruins are the amazing statues of Easter Island. Before going further, we will point out that this is a popular error.

Easter Island was once a mountain in a great civilization, we have reason to believe, but the monuments of Easter are not the work of any civilization as old as 12,000 years. They are perhaps not more than three thousand years old.

However, it can be generally accepted that these colossal figures are the work of a people descended from the great civilization of Mu, which was almost totally destroyed in the unknown catastrophe that made an entire continent (or more properly, three continents) sink into the Pacific.

These effigies are the only remnant of the culture of those ancient peoples left to us the Pacific area by the people of Mu. Churchward mentions other islands, where he has noted ruined buildings and even what he terms a "city," visible in the clear depths of the tropic waters.

However, he has not been entirely substantiated in these observations because of the difficulty of making such observations, since the surface of the water is rarely calm enough for close study.

Perhaps more indicative of ancient civilizations are the ruins of the ancient Mayas, and the Incas, in Guatemala and in Peru respectively.

Neither of these can be said to be anywhere near 12,000 years old, yet it is sure that both are colonies established by some other, unknown empire, now vanished. The most logical is that of Lemuria, although Atlantis, believed to be a less scientific empire, might have had something to do with it.

Plato says Atlantis was a continent off Gibraltar, and he goes as far back as 9000 years. He mentions this date as the date when the "subsidence" began, and makes it quite clear that no violent cataclysm caused Atlantis to disappear, such as is said by legend to be the cause of Mu's destruction. It was a subsidence that took 3000 years, and which resulted finally in a vast area of marshy

nature in the Atlantic, which today is still referred to as the Sargasso Sea.

Ancient Egypt, says Plato, was a descendant of Atlantis, and he even tells of great wars between them, Egypt having revolted. He tells also of wars between the Carthaginians and the Atlanteans, in spite of the fact that Carthage was a civilized city only thousands of years after Atlantis was a swamp.

Can it be that these mysterious invaders from the Atlantic were not Atlanteans at all, but Mayas, or Incas? There isn't much to substantiate this theory, as neither the Mayas nor the Incas were seagoing peoples.

The only other tenable hypothesis is that the ships came from Lemuria. If so, it means that Lemuria had a much advanced civilization over Atlantis, or perhaps even over Egypt and Carthage.

There are even Lemurian legends connected with our own country, Death Valley and Mt. Shasta being linked with that ancient people. Strange temples were supposed to have been erected atop Shasta, and even today, weird blue ceremonial lights are said to be seen. Legend certainly is persistent!

Ancient Lemuria possessed fabulous science. She is said to have known the secret of gravity, and the result was manifested in huge dirigible-like airships, possessing no screws or wings or gondolas. Instead, the whole interior of the ship was utilized for passengers and freight. And windows lined the sides.

Their ceiling was purported to be only 600 feet, and they were comparatively slow, 60 miles per hour being top speed, and a peculiar feature was the fact that they could not travel far over water! Thus, ocean crossing was impossible.

Great cities were built, and the architecture was so striking that even today, we find it copied in all old civilizations, and many modern countries. The pyramid is said to be an invention of Mu. It is copied by the Maya, the Inca, and the Egyptian. Ancient Carthage also borrowed it.

Yes, we can well believe that 12,000 years ago, on this planet, several amazing civilizations existed that may have rivaled ours of today!

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QUIZ ANSWERS

(Quiz on page 132)

A MATTER OF CHOICE

- | | | |
|---------|---------|----------|
| 1—Three | 6—One | 11—One |
| 2—One | 7—Three | 12—Three |
| 3—One | 8—Two | 13—Three |
| 4—Four | 9—One | 14—One |
| 5—Two | 10—One | 15—Three |

TRUE AND FALSE

- 1—True 3—False 5—True 7—True 9—True
2—False 4—False 6—False 8—True 10—False

I.Q. TEST

1—An owl cannot move his eyes, they are fixed in their sockets. He would have to move his whole head.

2—The new moon doesn't rise in the evening, it sets. It rises in the morning.

3—Trisecting an angle is mathematically impossible as is squaring a circle.

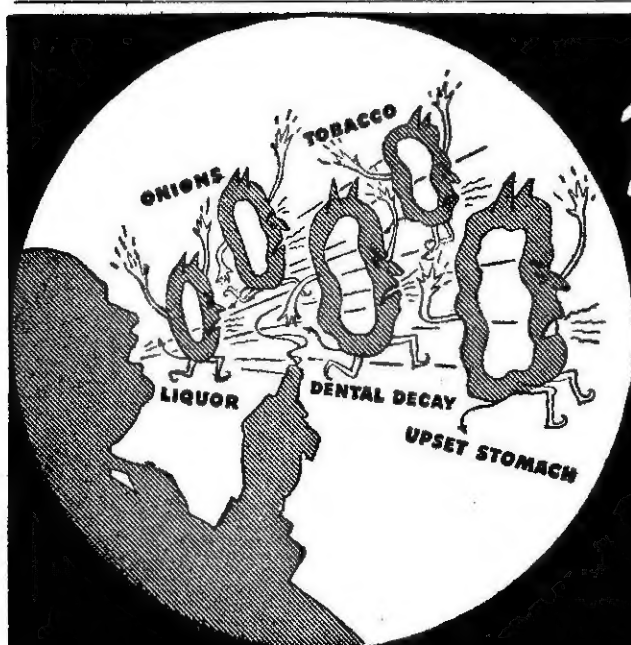
4—The giraffe doesn't make any sound. Its vocal cords are too weak.

5—A porcupine does not shoot quills from his

back. The story is probably due to the fact that the quills easily drop out.

CORRESPONDENCE CORNER

Eddie Parker, 424 S. Broadway, Fort Scott, Kan., 19 yrs., would like to receive letters from anyone in any field. . . . Marie Langford, 5 Hal-laton, Humberstone, Leicester, Eng., 21 yrs., would like to correspond with people all over the world. . . . Bob Studley, 519 W. 134th St., N.Y.C., wants correspondents who are S-F fans, anywhere. . . . M. Korshak, 150 E. 91st St., N.Y.C., would like to sell rare S-F magazines to fans. . . . Harold Early, 1357 N. Main St., Ann Arbor, Mich., has for sale Vol. 1 No. 1 of AMAZING STORIES. . . . John Cunningham, 2050 Gilbert St., Beaumont, Tex., would like pen pals of any age from foreign nations; especially Hawaii and Europe. . . . Ernest McCabe, 120 E. Water St., Biloxi, Miss., has back issues of all S-F magazines from 1928 to date, for sale or trade for press and printer's supplies; all replies answered. . . . Frank J. Brueckel, 1424 W. Highland Ave., Milwaukee, Wis., would like to purchase back issues of AMAZING STORIES, 1926 through 1930, and AMAZING STORIES QUARTERLY, 1929; also various other magazines. Those having copies in good condition notify him and state prices. . . .



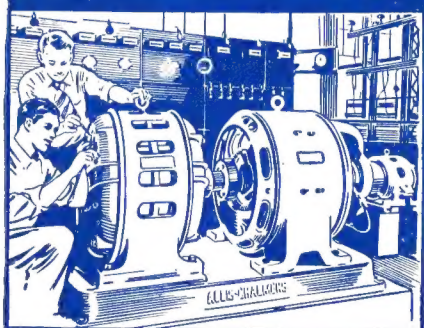
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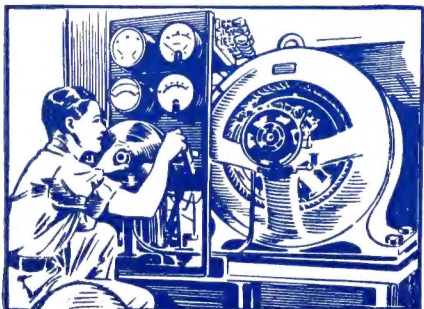
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12,000 YEARS AGO

The most fascinating legend of man is the legend of the lost continent of Lemuria. It is the firm belief of many authorities and archaeologists, that approximately 12,000 years ago, a great civilization flourished in the Pacific, mother country of many colonies all over the globe, among them Yucatan, Egypt, Babylon, and many others. All of today's civilizations are supposed to be the results of Lemurian colonization. (For complete details, see page 144.)

